SENSE OF COMMUNITY: PREDICTORS, EXPERIENCE, AND OUTCOMES IN ADULT RECREATIONAL SPORTS

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ABSTRACT

This dissertation is comprised of three articles that seek to explore sense of community (SOC) within adult recreational sports leagues. Although a body of literature describes SOC within this setting, little is understood about specific predictors or outcomes of SOC. This dissertation addresses that gap by examining achievement goal orientations as potential predictors, and testing both bridging and bonding social capital as an outcome related to SOC in sport. In addition, article two serves as a bridge between articles one and three through qualitative exploration of the meaning that participant's ascribe to their experiences in a recreational tennis league.

Article one assesses the relation of achievement goal orientations, at both the individual and team levels, to SOC within an adult recreational flag football league. Results indicate a negative association between individual ego orientation and SOC, and a positive association between team task orientation and SOC. Further, the negative relationship of individual ego-orientation is moderated by aggregate team task orientation. In other words, the negative relation of individual ego orientation is mitigated when on a team with a high task orientation. In addition to furthering understanding of the importance of group and individual factors, this article also supports management techniques that seek to encourage task-involvement.

The second article is a qualitative exploration of participants' experiences in a recreational tennis league. Although SOC was used as a sensitizing concept, this research

asked broad questions about the experience in order to ascertain what was important to participants regarding their involvement. Findings suggest that SOC is an important part of the experience. Further, the findings point towards the theory of Sense of Community in Sport (SCS) as developed by Warner and colleagues as a useful framework in which to explore SOC in recreational tennis leagues.

Based on the findings of article two, the purpose of article three was to test the relation of SOC, through the framework of SCS, to the potential outcomes of bonding and bridging social capital. In addition, article three examines the moderating influences of social identity, psychological involvement, and behavioral involvement on the relation between SOC and social capital. Results of article three support significant associations between SOC and bonding social capital depending on levels of social identity, psychological involvement, and behavioral involvement. Specifically high SOC relates positively to high bonding social capital when psychological involvement is average or above average. Significant associations with bridging social capital were not supported. These results also provide practical recommendations for managers seeking to enhance SOC and social capital.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Adult recreational sports offer a valuable opportunity to create a positive impact for participants. As recreational sports are playing an increasingly prominent role in the lives of many individuals, this represents an important setting to explore. Recreational sports are popular physical activity choices for many adults with nearly 20% of all Americans participating in some form of recreational sports (Ham, Kruger, & Tudor-Locke, 2009). Thus, from a simple numerical viewpoint, this setting is important due to its ability to impact a mass of individuals. Second, settings such as recreational sports are playing an increasingly important role within a larger societal context. Specifically, several authors argue that "communities of interest" (i.e., places where people gather and form relationships based around a common interest) are replacing traditional sites, including neighborhoods and churches, as ideal places to experience community (Putnam, 2000; Sharpe, 2005). Indeed, informal associations with friends outside of a geographic neighborhood are increasing (Schwadel & Stout, 2012). This includes associations in recreational sport settings, therefore creating a setting that may play an increasingly prominent role in an individual's life.

One potentially useful construct through which to examine the role of adult recreational sports is a feeling of a sense of community (SOC). Existing research points to adult recreational sport settings as places where SOC may develop and also to several

positive outcomes, such as an improved quality of life and a relevant life purpose, that are related to SOC (e.g., Lyons & Dionigi, 2007; Warner & Dixon, 2011; Warner & Dixon, 2013). However, despite these findings, little is known about the specific mechanisms that relate to the development of SOC in this context, the meaning that participants ascribe to participation, and additional outcomes associated with SOC that may be valuable to society. For these reasons, exploration of SOC in an adult recreational sport context is warranted. This research seeks to address these gaps.

As noted, research links the feeling of SOC to a range of positive outcomes that enhance a person's quality of life. For example, individuals who feel a strong SOC are more likely to engage in healthy activities (Peterson & Reid, 2003), experience decreased feelings of alienation and negative moods (Pretty, Andrews, & Collett, 1994; Roussi, Rapti, & Kiosseoglou, 2006), and feel increased self-confidence, emotional connections, and empowerment (Goodwin, et al., 2009; Peterson & Reid, 2003). Further, individuals are more likely to participate in civic activities (Chavis & Wandersman, 1990), engage in prosocial behavior, and volunteer (Omoto & Snyder, 2009) when they feel a stronger SOC. Thus, when community members experience SOC, they are more likely to also develop greater overall well-being and contribute more to their community.

Sense of community is defined in accordance with McMillan and Chavis' theory of a psychological sense of community "as a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986, p. 9). In this theoretical approach, SOC develops through the interplay of four subelements: membership, influence, integration and fulfillment of needs, and

shared emotional connection (McMillan, 2011). These four primary elements interact with each other to form an overall SOC.

In addition to the general theoretical approach taken by McMillan and Chavis, Warner and colleagues (Warner & Dixon, 2011; Warner, Kerwin, & Walker, 2013) developed an approach to the study of SOC specific to sport settings. This approach argues that given the unique nature of the sport context, SOC is manifested differently, and, thus, requires its own theoretical explication. In this explanation, SOC develops through the interplay of six factors: (a) administrative consideration, (b) common interest, (c) equity in administrative decisions, (d) leadership opportunities, (e) social spaces, and (f) competition.

Despite the numerous positive outcomes associated with SOC, it appears that SOC is declining across the United States. Deteriorating social networks and ties point to a decrease in SOC (Ellis & Sharma, 2013; Putnam, 2000; Schwadel & Stout, 2012). This decline includes connections developed through participation in recreational sports. For instance, in an ethnographic comparison of soccer in Ghana and the United States, Ellis and Sharma (2013) argue that community connections in this setting are weakening in the United States due to an overly formalized structure. Although SOC is declining, recreational sport settings present a logical setting in which to develop SOC.

In addition to the recreational sport setting offering a place for people to gather, the leisure setting is particularly conducive to the development of community. The existing literature includes arguments explaining why leisure, including recreational sports, represents an ideal setting for the development of personal relationships. For example, Turner (1974) argued that leisure allows individuals to step out of their normal

lives, thus enhancing the ability of relationships to develop. Alternatively, for Sharpe (2005), leisure's unique and seemingly contradictory elements of intimacy and anonymity, and obligation and freedom appear to be particularly well-suited for creating a feeling of community. Thus, leisure, and in particular recreational sports, appears to be a unique and promising setting for the development of SOC.

The extant literature supports the notion that SOC develops in recreational contexts. For instance, Lyons and Dionigi's (2007) qualitiatve examination of adults who participate in Master's sports found that participants' experiences matched well with the development of SOC within the sport setting. Specifically, community members' experiences of sharing meaning in a common activity corresponded to elments of membership, influence, need fulfillment, and shared emotional connection. Other studies have explored the development of SOC in recreational settings such as wheelchair rugby (Goodwin, et al., 2009), whitewater rafting (Sharpe, 2005), and summer camp (Goodwin, Lieberman, Johnston, & Leo, 2011). It is clear, therefore, that SOC can develop in various recreational settings.

Despite the fact that SOC may develop within recreational sport settings, simply being involved in recreational activities or simply interacting with others does not automatically lead to a sense of community (Chalip, 2006). For example, just as participation in recreational sport may lead to stronger communities, sport may also divide communities by creating rifts around particular teams or between participants and nonparticipants (Smith & Ingham, 2003). A feeling of community, therefore, must be faciliated and actively created (Rosenblatt, Cheshire, & Lawrence, 2009). The missing link in the existing research, then, is an understanding of the specific means by which

SOC is facilitated in a recreational sport setting (Chalip, 2006; Warner & Dixon, 2011). An improved understanding of these mechanisms will benefit recreational sport administrators in designing programs that are more likely to enhance SOC.

A substantial body of literature has used achievement-goal theory dispositional goal orientations to explain outcomes in sport settings. Thus, the use of achievement-goal theory may be a promising area to assist in examining SOC in recreational sport settings.

Multiple studies have demonstrated the importance of goal orientations in predicting positive social outcomes (see Roberts, 2012 for an extensive review). The concept of motivational goal orientations emerges from achievement-goal theory (AGT). Broadly, AGT posits that individuals perceive success through either self-referenced criteria (task) or other-referenced criteria (ego). For example, an individual who is motivated to beat his or her personal best record would be task-oriented while an individual who is motivated to beat an opponent would be ego-oriented. The adoption of the particular disposition then triggers a related schema of behavioral patterns and outcomes (Ames, 1992). For instance, if the individual is motivated to achieve his or her personal best versus simply being motivated to be better than an opponent, he or she is more likely to value effort in pursuit of the goal (Roberts, 2012).

Although not a formal part of AGT, some research suggests that social goals play an important part in individual motivations (Allen, 2003, 2005; González-Cutre, Sicilia, Moreno, & Fernández-Balboa, 2009; Hodge, Allen, & Smellie, 2008). Social goals represent the desire to maintain positive peer relationships or the desire to follow societal rules and conform to role expectations (Wentzel, 1992; Wentzel & Wigfield, 1998). The

extant literature suggests a reciprocal relationship between social goals and achievement goals (Guan, Ping, McBride, & Keating, 2013; Guan, Xiang, McBride, & Brene, 2006). In addition, social achievement goals have been positively correlated with outcomes such as identity (Proios, 2012), performance (Wentzel, 1998), sportsmanlike play (Stuntz & Weiss, 2003), effort (Guan, et al., 2013), interest (Stuntz & Weiss, 2003), and perceived belonging (Hodge, Allen, & Smellie, 2008). Due to these relationships, some researchers have suggested that social goals be included as part of the study of achievement goals (e.g., Allen, 2003, 2005; Guan, McBride, & Keating, 2013; Hodge, Allen, & Smellie, 2008; Urdan & Maehr, 1995).

Previous research suggests links between motivational goal orientations to both positive and negative social outcomes in sport settings. In an extensive review of the extant literature, Roberts (2012) summarizes research demonstrating significant correlations between achievement goals and relevant social variables such as contribution to society, social purposes, activity participation and involvement, cooperation with others, team integration, good citizen purposes, and relatedness. Fundamentally, peer relationships are enhanced in sport contexts that promote a task-involved environment (Roberts). Similarly, SOC is primarily about the value of human relationships. Thus, it would appear that a task-involved environment would also be positively linked to these outcomes. Conceptually, individuals who are task-oriented also appear to be more likely to engage in relationships within the community. When an individual is task-oriented, his or her definition of competence does not involve comparison to a competitor or team. Thus, given that other members of the community are not threats to the achievement of competence, a task-oriented individual would be more willing to positively engage with

community members. Despite these logical links, however, no study has specifically examined the link between achievement goals and SOC.

In addition to an improved understanding of how SOC develops in a sport setting, it is also important to understand additional outcomes related to SOC. Although an array of research exists connecting SOC to positive outcomes, important gaps remain. For instance, while previous research suggests SOC influences a number of outcomes that may enhance an overall quality of life, the existing research has not addressed the specific social capital networks that may result from SOC. These networks may be important for a number of reasons, including their ability to improve health-related outcomes (Folland, 2013; Kawachi & Berkman, 2000). Increasing health disparities are well noted within the literature (Meyer, Yoon, Kaufman, Office for State, Tribal, Local and Territorial Support, CDC, & Center for Surveillance, Epidemiology, and Laboratory Services, CDC, 2013). Thus, examining the potential role of SOC in a recreational sport setting to influence those health disparities through the development of social capital has the potential to provide valuable practical information and address an existing gap within the literature related to SOC and adult recreational sports.

Given the importance of SOC, the popularity of recreational sport, and the apparent decline in SOC, it is important to investigate how recreational sport activities can be used to develop SOC**.** Further, with health issues an increasing societal concern, it is valuable to explore how SOC can improve overall health through the development of social capital networks. As noted, a gap exists within the current literature related to the link between achievement goals and SOC. Therefore, the purpose of these studies is to explore, within an adult recreational sport context, factors that lead to the development of

SOC, the experience of participants in an adult recreational sports league, and additional outcomes related to SOC.

Summary of Articles

This dissertation is comprised of three articles. Although each article is distinct from the others, similar themes exist amongst them as they all explore the construct of SOC. More specifically, the three articles will progress by first examining some factors that relate to the development of SOC, then exploring the participant experience, and finally looking at additional outcomes that SOC may influence.

The first article explored the relation between motivational goal orientations and SOC in an adult recreational flag football league. This study hypothesized relations between individual goal orientations (task, ego, social), and SOC at both the individual and group level. Results provide a foundation for the overall research questions in two important ways. First, the study looks at individual orientations in accordance with AGT. Given that the relation between dispositions and SOC has not specifically been explored in an adult recreational sport setting, it is important to lay this groundwork. Second, this study includes social motivational orientations as a potential predictor of SOC. Social benefits are commonly mentioned as important outcomes and motivations for participating in adult recreational sports (Green, 2005; Youn-Lim, et al., 2011) and research has suggested that social goals have a relationship to the perceived motivational climate (González-Cutre, et al., 2009). Although social goal dispositions are not generally considered a formal part of AGT, social goals may play a more important role in the adult recreational sport setting.

The second article sought to expand comprehension of the adult recreational

sport setting by using a qualitative approach to compile in-depth data that may help provide better understanding of a particular context (Creswell, 2014). Although SOC may be a valuable component of the experience, it is important to understand the participants' experience of the context. Given, therefore, the uniqueness of this particular context, it is important to use qualitative methods to address the particular meaning that participants ascribe to their experience to determine if SOC is an important element of the experience. More specifically, this article uses semistructured interviews to explore questions related to the experience of participants in recreational tennis leagues. The findings from this article were then used to inform the operationalization of SOC in article three.

Article three shifts from focusing on predictors and the experience of SOC to examining outcomes associated with SOC. Specifically, this article examines the relation of SOC, as moderated by social identity, psychological involvement, and behavioral involvement, to both bonding and bridging social capital. Research suggests that both bridging and bonding social capital may develop in sports settings (e.g., Vermeulen & Verweel, 2009; Walseth, 2008). It is also clear that positive outcomes in sport do not automatically occur and must be actively managed (Chalip, 2006). However, little is understood about what psychological and behavioral constructs relate to the development of social capital in this setting. Given the explanatory value of SOC in other contexts (Pretty, Andrews, & Collett, 1994; Roussi, Rapti, & Kiosseoglou, 2006), and the conceptual relation of SOC to social capital, it is logical to suggest that SOC within a recreational sport context may predict overall social capital. In addition, in this case, the relationship of interest is between SOC within a particular context and a broader outcome (social capital). Thus, the importance of the particular context is hypothesized to

moderate the relation between SOC and social capital. In this study, the constructs of social identity, psychological involvement, and behavioral involvement are tested as moderators of the relation between SOC and social capital.

As noted earlier, the development of SOC may be an important component of participation in an adult recreational sport program. Not only are these social outcomes associated with numerous positive results, it is also clear from the literature that the adult recreational sport setting may be an arena where SOC is developed (e.g., Goodwin, et al., 2009; Lyons & Dionigi, 2007). Missing from the current research, however, is a full comprehension of the factors that lead to SOC in this setting, the nature of the experience in a recreational tennis league, and the role that SOC plays in broader outcomes. This research examines predictors of SOC, related outcomes of SOC, and the meaning that participants ascribe to their experience with a recreational tennis league. In so doing, the research provides valuable information as both a foundation for future research exploring this topic and important insight for recreational sport administrators to assist in the design of programs that are likely to facilitate the development of positive social outcomes such as SOC.

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CHAPTER 2

REVIEW OF LITERATURE

The development of a sense of community (SOC) can be a positive outcome of participation in an adult recreational sport program as stronger feelings of SOC are associated with a range of positive life benefits. For example, individuals who feel strong SOC are more likely to engage in healthy activities (Peterson & Reid, 2003), experience decreased feelings of alienation (Pretty, Andrews, & Collett, 1994), decreased negative moods (Roussi, Rapti, & Kiosseoglou, 2006), increased self-confidence and emotional connections (Goodwin, et al., 2009), improved coping skills (Greenfield & Marks, 2010), and increased feelings of empowerment (Peterson & Reid, 2003). Further, increased civic participation (Chavis & Wandersman, 1990), prosocial behavior, and volunteerism (Omoto & Snyder, 2009) are all positively associated with higher levels of SOC. In sum, individuals who feel greater SOC are likely to experience more positive emotions and be more actively engaged in their community. These benefits make SOC a worthwhile area of study.

The development of SOC is an often-cited goal of community sport programs (Warner & Dixon, 2011). Despite this goal, a substantial gap exists in the current research related to SOC in adult recreational sport contexts. More specifically, the extant research provides limited information related to specific factors within this setting that enhance SOC, the meaning of the experience for participants, and what additional

outcomes SOC can influence. The purpose of this chapter is to lay an empirical and logical foundation for further inquiry related to SOC in adult recreational sports. Broadly, this chapter will discuss relevant theories of SOC, potential predictors of SOC, outcomes related to SOC, and additional factors that may moderate the impact of SOC. Specifically, this chapter will proceed as follows: 1) discussion of theoretical foundations of SOC, including a sport-specific theory of SOC; 2) description of goal orientations and their relevance as potential predictors of SOC; 3) outline of the construct of social capital and its particular importance and relevance as a possible outcome related to SOC; and 4) overview of social identity, psychological involvement, and behavioral involvement as additional relevant variables that may moderate the relation of SOC to social capital.

Conceptualizing Sense of Community in a Recreational Sports Setting

Although the general idea of community makes frequent appearances in a long chain of literature (Day, 2006), Sarason (1974) represents one of the first attempts to clarify the idea and importance of SOC. While acknowledging the difficulty of a precise definition, Sarason broadly described SOC as "the sense that one was part of a readily available, mutually supportive network of relationships upon which one could depend" (Sarason, 1974, p. 1). He went on to state that the idea was so important that it should be the founding principal of the emerging field of community psychology. Later McMillan and Chavis (1986) more specifically defined psychological sense of community "as a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9). For McMillan and Chavis (1986), SOC develops

through the interaction of four elements – membership, needs fulfillment, influence, and a shared emotional connection. Since this initial definition, numerous studies have demonstrated the applicability of this theoretical approach to multiple settings and populations (e.g., Goodwin, et al., 2009; Obst, et al., 2002a; Obst & Stafurik, 2010; Obst & Tham, 2009; Obst, et al., 2002b; Sayer, Beaven, Stringer, & Hemena, 2013). The following sections will provide an overview of the four elements of McMillan and Chavis' theory with supporting examples of how these elements manifest within a recreational sport program.

Membership

Membership refers to the general feeling that one belongs as part of the group (McMillan & Chavis, 1986). The feeling of membership develops through the interplay of multiple subelements including boundaries, emotional safety, a sense of belonging, and a personal investment (McMillan, 2011). Boundaries clearly denote who is and who is not part of the group and can be formed by barriers to membership or symbols of membership. Within the boundaries of membership, the group member feels emotional safety to speak honestly and to be vulnerable. A sense of belonging includes not just a feeling of belonging, but also an awareness of being accepted. Finally, one's personal investment in the group represents a form of dues that are paid to be part of the group (McMillan, 2011). Many of these elements are often present in adult recreational sport programs. For example, adult recreational sport programs generally include clear boundaries. Participants register for a particular team and that team has clear members and often has symbols, such as a team uniform, denoting who belongs to the group and who does not. While emotional safety and a sense of belonging are not automatic

components of the sport experience, given that many individuals participate in recreational sport for social reasons (Allen, 2003; Allen, 2005), it is logical to state that relationships allowing for emotional safety and a sense of belonging may form. Finally, individuals create a personal investment in the group through time spent participating on the team and potentially through financial investment in league registration fees and equipment.

Influence

The second element of SOC is *influence* (McMillan & Chavis, 1986) or trust (McMillan, 1996). Similar to membership, influence is achieved through a personal investment. This personal investment represents a sacrifice given to belong to the group and makes the individual member more attractive to the community (McMillan, 2011). In a community, influence operates bi-directionally; that is, the community influences the member through community norms and shared values and the member influences the community by helping to develop those norms (McMillan, 2011). Within a recreational sport league, the community norm may emphasize winning over having fun, or vice versa. When an individual experiences SOC, those community norms are likely to influence the individual. In this example, the individual is more likely to ascribe to the value of simply having fun - and the individual is also likely to influence the norm - the importance the individual places on having fun will influence the community norm. In this manner, influence operates in both directions.

Integration and Fulfillment of Needs

Integration and fulfillment of needs is the third element of SOC in McMillan and Chavis' (1986) theory. Put simply, individuals are attracted to communities that help them fulfill their personal needs. Those needs include physical, emotional, social, or psychological needs, and consist of rewards such as status, success, and demonstrated competency (McMillan, 2011). When an individual perceives that his or her needs are met within a community, that individual is more likely to feel SOC within that group. One example of influence is generative trading, or the handing off or responsibilities and roles from one generation to the next (McMillan, 2011). For instance, generative trading occurs when the role of team captain passes from one individual to another when a captain relocates or no longer has available time to continue that role.

Shared Emotional Connection

Finally, a *shared emotional connection* contributes to SOC (McMillan & Chavis, 1986). A shared emotional connection develops when community members spend time together around events that have value, closure, and that honor members. This shared time also becomes symbolized in rituals, common symbols, traditions, and stories (McMillan, 2011). Adult recreational sports offer an ideal setting to experience a shared emotional connection. Participants share in experiences that have clear closure and most likely drama. That is, games and seasons have clear ending points (closure) and the excitement related to competition provides a dramatic experience. In addition, programs and teams often honor members through either verbal praise or formal league and team awards.

A Sport Specific Theory of SOC

Although McMillan and Warner's framework has been used in a variety of settings, a body of research also suggests that SOC is contextual and, therefore, manifests uniquely in different settings (Day, 2006; Hill, 1996). Further, community may be considered a geographic space, a social network, or a type of relationship (Day). These various types of communities may lead to overlapping communities, thus further complicating the study of SOC (Clopton & Finch, 2010).

A growing set of literature has responded to these concerns by attempting to describe how SOC operates within specific contexts. Using a grounded theory approach, Warner and colleagues built upon a series of studies to develop the Theory of Sense of Community in Sport (SCS; Warner & Dixon, 2011; Warner & Dixon, 2013; Warner, Dixon, & Chalip, 2012; Warner, Kerwin, & Walker, 2013). According to this conceptualization, SOC in a sport setting manifests through the interplay of six elements (a) administrative consideration, (b) common interest, (c) equity in administrative decisions, (d) leadership opportunities, (e) social spaces, and (f) competition (Warner & Dixon, 2011; Warner, Kerwin, & Walker, 2013). Administrative consideration represents the intentional care and concern of administrators. This care may also extend beyond the sports arena (Warner & Dixon, 2011). For example, league administration expressing genuine concern after an injury would represent administrative consideration. Similarly, equity of administration decisions is defined as the demonstration that all community members are treated equally. This may include equal opportunities for success or equal punishments for transgressions. In addition, community members have both informal and formal opportunities for leadership. In recreational sports settings, this could be the role of team captain or having a voice in overall league administration. Common interest

notes that a sense of community forms by individuals coming together for a shared interest; in this case, the common interest is primarily the sport. Further, bringing together individuals often occurs in social spaces where athletes interact with each other. Competition suggests that both internal and external rivalries enhance community bonding by providing an avenue for community members to share in struggles to excel (Warner & Dixon, 2011).

Creating SOC in a Recreational Sports Program: Achievement Goals as Potential Predictors

Multiple studies have discussed the development of SOC in adult recreational sport contexts. For instance, Lyons and Dionigi's (2007) qualitative examination of adults who participate in Master's sports found that participants' experiences matched well with the development of SOC within the sport setting. Specifically, community members experiences of sharing meaning in a common activity corresponded to elements of membership, influence, need fulfillment, and shared emotional connection. Other studies have explored the development of SOC and its theoretical cousin, social capital, in recreational settings such as wheelchair rugby (Goodwin, et al., 2009), whitewater rafting (Sharpe, 2005), and summer camp (Goodwin, et al., 2011). In addition, Chalip (2006) suggested that one of the key ways that sport can impact society is through community development, including a sense of community (Warner, Dixon, & Chalip, 2012).

Notwithstanding the logic that SOC may develop within an adult recreational sport program, sports can also divide neighbors based on interests and access (Smith & Ingham, 2003). Thus, it is important to understand how programs are designed, managed,

and marketed to optimize positive outcomes (Chalip, 2006). Missing from the current research is a more specific understanding of how programs can be managed to enhance SOC. One potential area of interest relates to dispositional motivational goal orientations. Multiple studies have linked goal orientations to social outcomes in sport programs, thus making this a valuable area to explore (Roberts, 2012).

Achievement-goal Theory and Motivational Orientations

As noted, multiple studies have linked goal orientations to social outcomes in sport programs (Roberts, 2012). These constructs are rooted in achievement-goal theory, a social-cognitive theory of motivation that seeks to explain variances in motivational behaviors based on the type of goals that an individual has in an achievement setting (e.g., sports, the classroom). According to AGT, individuals adopt particular patterns of behavior based on their achievement related goal. The adoption of a particular goal serves as a sort of trigger for a "program" of cognitive processes that relate to how one interprets, responds, and acts in a given situation (Ames, 1992). A person's particular leaning at any given time towards one particular goal involvement is considered his or her achievement goal orientation.

At its core, AGT revolves around the notion of competence. That is, individuals approach tasks in a manner to demonstrate their competence or to avoid demonstrating their incompetence. Competence, however, may have more than one meaning suggesting that how an individual perceives success or failure is directly attributable to his or her definition of competence and the accompanying performance goals. For example, if an individual defines competence as self-improvement, then his or her behaviors will focus on effort and mastery. Alternatively, if an individual defines competence as

demonstrating that he or she is better than others are, then his or her goals and accompanying behaviors will reflect this. Broadly, therefore, AGT states that individuals have either a self-referenced definition of competence that emphasizes mastery and effort, or another-referenced definition of competence that emphasizes success compared to someone else. Each of these definitions of competence can lead to different behaviors.

Origins and basic constructs. Before proceeding with a detailed discussion of AGT, it is important to understand the context in which AGT emerged. AGT is, fundamentally, a theory based in the social-cognitive tradition (Bandura, 1986). Social-cognitive theories posit that individuals are intentional and rational beings that are influenced by their own internal cognitive processes, the situation, and their behaviors. According to AGT, people's cognitive processes define competence, or success based on the specific goals that they adopt. These goals govern subsequent behaviors and decision-making and are also influenced by the context or situation in which they are relevant (Roberts, 2012). In other words, a person's motivational behaviors – persistence, effort, choice, and attitude – are based on his or her specific achievement related goals. This rooting in social-cognitive theory is particularly important because it suggests that outcomes are influenced by both an individual's cognitions (e.g., goal orientations) as well as the social climate (e.g., team goal orientations).

AGT originated in the late 1970s primarily through the work of John Nicholls and Carole Dweck, but also through the contributions of Marty Maehr, Carol Ames, Russ Ames, Ken Kill, Carol Farmer, and Glyn Roberts (Roberts, 2012). According to Nicholls (1978), children initially possess an undifferentiated sense of ability. That is, when assessing competence or achievement, they do not differentiate between luck, effort,

ability, or task difficulty. It is not until approximately the age of 12 that children are able to distinguish these differing concepts (Nicholls & Miller, 1983). Once an individual is able to differentiate these items, perceived ability becomes relevant as the individual is trying to demonstrate normative ability compared to others. At this point, a person's belief about what constitutes achievement, or what constitutes demonstrating ability, becomes relevant as it determines his or her own perception of achievement (Roberts, 2012). Thus, a person's beliefs about competence influence his or her actions, motivations, and outcomes.

According to AGT, individuals perceive success through either self-referenced criteria (task) or other-referenced criteria (ego). Task-oriented individuals seek to demonstrate competence through the development of skills and mastering of tasks (Elliott, 2005). The only comparison is with oneself (self-referenced criteria). For example, a runner would perceive that he or she had achieved competence if he or she set a personal best time, even if he or she lost the race. The performance of others in this orientation is irrelevant as a marker of success. The individual is solely interested in the demonstration of competence in relation to his or herself. In contrast, ego-oriented individuals seek to demonstrate competence by outperforming others, "winning," or simply demonstrating that they are superior to teammates or opponents (Elliot, 2005). Returning to the example of a runner, an ego-oriented runner would perceive the attainment of success if he or she won the race, even if the personal time was slower than his or her best.

AGT hypothesizes that a task-oriented individual is more likely to engage in positive adaptive behaviors such as cooperating with others, persisting in the face of

failure, exerting effort, selecting challenging tasks, and devoting attention and interest to the task (see Roberts, 2012 for a review). As the individual's criteria for success is self-referenced, the individual is likely to believe that he or she has control over the outcome and, therefore, engage in positive adaptive behaviors. One positive adaptive behavior may be a willingness to engage with other members of the community. Given that the individual's definition of achievement relates solely to his or her own performance, the performance of teammates or competitors becomes less relevant. Thus, as other individuals' performances are not a threat to one's own feelings of competence, it is logical to suggest that a task-oriented individual would be more willing to develop relationships with other members of the community that could lead to SOC.

Research supports the contention that being task-involved is related to a number of positive outcomes including enhanced self-esteem, good citizenship, cooperation, physically active lifestyles, prosocial values, development of life skills, increased persistence, higher levels of effort, increased enjoyment, satisfaction, interest, and positive peer relationships (see Roberts, 2012 for a review). The positive outcomes related to having a task-oriented disposition are a central part of AGT.

Findings related to task-involvement and positive social outcomes are of central importance. Of more specific importance are connections between task-involvement and cooperation. For instance, a significant correlation exists between being task-involved in moderate physical activity and cooperation (Viira & Radusepp, 2000). Task-involved individuals are also more likely to engage in cooperative discussion when performing a task (Harris, Yuill, & Luckin, 2008). This willingness to cooperate with others suggests that SOC is more likely to develop in task-involved individuals.

In addition, recent findings point to a positive relation between task-involvement and relatedness (Shen, McCaughtry, Martin, & Fahlman, 2009; Wang, Biddle, & Elliot, 2007). In each of these studies, groups or individuals who reported higher task-orientation also reported higher feelings of relatedness. The construct of relatedness emerges from Self-Determination Theory and refers to the desire to be connected to others, to care for them, to be cared for by them, and to sense a feeling of belonging with them (Deci & Ryan, 2000; 2004). Note that the definition of relatedness includes connections to others and a feeling of belonging, suggesting strong similarities between the constructs of relatedness and SOC. Thus, it would appear that strong connections exist between task-involvement and SOC.

Finally, task-involved individuals are more likely to experience a positive affect (Kaye, Conroy, & Fifer, 2008). Although this is not directly a social outcome, it may be that individuals who experience more positive emotions are likely to engage with members in their community and be part of the community. This connection is consistent with previous findings that reported a relationship between SOC and a decrease in negative moods (Roussi, Rapti, & Kiosseoglou, 2006).

In contrast to the positive associations between being task-involved and social outcomes, logic and empirical evidence suggest that individuals who are more ego-involved are less likely to develop SOC. Logically, when individuals measure their success as compared to other individuals, they may be less likely to develop positive relationships with those individuals. In this case, the other person (teammate or competitor) is a threat to one's own demonstration of competence as that demonstration rests primarily on the comparison of performance to another person. Therefore, it follows

that the individual who has a high ego-orientation would be unlikely to engage with or cooperate with other members of the community when those members represent a danger to the demonstration of competence.

Empirical research also points to negative relations between ego-involved orientations and SOC. Individuals who are ego-involved are more likely to experience anxiety (Smith, Duda, Allen, & Hall, 2002) and negative affect (Kaye, Conroy, & Fifer, 2008). If individuals are outwardly expressing these negative emotions, it may be more difficult for other individuals to engage with them in positive social relationships. Thus, it would appear likely that individuals who are more ego-involved are less likely to develop a strong SOC.

Social goals. Although not a formal part of AGT, research suggests that social goals represent relevant dispositional goal orientations (Allen, 2003, 2005; González-Cutre, Sicilia, Moreno, & Fernández-Balboa, 2009; Hodge, Allen, & Smellie, 2008). Social goals signify the desire to maintain positive peer relationships or to follow societal rules and conform to role expectations (Wentzel, 1992; Wentzel & Wigfield, 1998). The extant literature suggests a reciprocal relationship between social goals and achievement goals (Guan, Ping, McBride, & Keating, 2006; Guan, McBride, & Keating, 2013). In addition, social achievement goals have been positively correlated with outcomes such as identity (Proios, 2012), performance (Wentzel, 1993), sportsmanlike play (Stuntz & Weiss, 2003), effort (Guan, et al., 2013), interest (2003), and perceived belonging (Hodge, Allen, & Smellie, 2008). Due to these relationships, some researchers have suggested that social goals be included as part of the study of achievement goals (e.g.,

Allen, 2003, 2005; Guan, et al., 2013; Hodge, Allen, & Smellie, 2008; Urdan & Maehr, 1995).

More specifically, Allen (2003, 2005) proposed that social goal orientations be further divided into three types - social affiliation, status, and recognition. A person who has a goal of social affiliation would feel successful when he or she develops and maintains mutually satisfying relationships (Allen, 2003), whereas a person with a social status orientation would feel successful when he or she gains social status among peers (Allen, 2005), and a person with social recognition orientation would feel successful when he or she gains recognition for his or her abilities from peers (Allen, 2005). Thus, given the logical and empirical links between social goals and positive social outcomes, it is worthwhile to continue to explore this potential dimension of achievement goals.

Potential Outcomes Related to SOC: Social Capital

It is clear that individuals who participate in recreational sport programs may develop SOC. It is also apparent that additional examination to enhance the understanding of factors that lead to SOC is warranted, and that achievement goals may help explain the development of SOC. Given the importance of SOC and evidence suggesting that recreational sport settings may be a valuable context in which to develop SOC, it is also important to explore additional outcomes that relate to SOC in this context.

Social capital is one possible and valuable relation to SOC, and more specifically social capital networks. Broadly, social capital describes the value of social relationships. While SOC focuses on a particularly feeling connected to social relationships, social capital explains the practical ways in which those social relationships manifest. Social

capital makes sense as an outcome, not only because it promises potential benefits, but also because it helps explain the value of social relations (Woolcock, 2010). Whereas SOC involves a feeling about social relationships within a group, social capital describes the value of those relationships. This conceptual overlap suggests potential positive associations between the two.

Though there is not a commonly agreed upon definition of social capital, it may generally be defined as the value of social networks and bringing people together (Putnam, 2000). The extant research posits that social capital leads to collective action that benefits the larger group (Putnam, Leonardi, & Nanetti, 1992), an improved flow of information, and potentially lowering of costs and improvement of economic activity by facilitating cooperation (Putnam, Leonardi, & Nanetti, 1992; Tonts, 2005). In sum, therefore, social capital describes the functional value of human relationships. Similarly, SOC also focuses on the value of human relationships, but as noted above, SOC shifts the emphasis from the practical value to the feeling of belonging.

Thus, both social capital and SOC are ultimately about the value of human relationships. One construct (social capital) attempts to describe the signs and benefits of those relationships and the other construct (SOC) describes the feeling of belonging to a group of people and the benefits of that feeling of belonging. Some researchers have even suggested that SOC may be a measure of social capital, or at minimum that it taps in to several elements such as participation, trust, and dependability that are important elements of social capital (Kawachi & Berkman, 2013; Meyer, Hyde, & Jenkins, 2005).

When discussing social capital, it is useful to distinguish between bridging and bonding social capital. One important aspect of social capital is that it may not always

have positive results. For example, one common criticism of social capital is that it is a force of exclusion as much as inclusion (Glover, 2004). One distinction that may span the gap between exclusion and inclusion is the distinction between boding and bridging capital. Bonding social capital is internally focused; it is the type of capital that connects a particular group (Putnam, 2000). Examples of bonding capital in an adult recreational sport setting may include the social capital that exists among participants who also live in the same neighborhood, or went to the same college.

In contrast, bridging capital represents social capital that links individuals across networks. Bridging social capital is important for linking to external assets and generating broader norms of reciprocity (Putnam, 2000). In the adults sports setting, bridging social capital may occur when league players from different demographics are able to connect and create relationships.

Bonding social capital and bridging social capital are not mutually exclusive; both can exist in similar circumstances, and research has noted the existence of both in recreational sports settings (e.g., Vermeulen & Verweel, 2009; Walseth, 2008). In addition, both serve important functions. As Putnam (2000) noted, bonding capital is the sociological super glue, while bridging capital is the sociological WD-40. Both have potential benefits, and both may be important in the recreational sports context.

Social Capital and Health

Social capital may be important for a variety of reasons as discussed above. Of particular interest is the relation of social capital to health outcomes. The existence of declining health across the population is well-documented (Meyer, Yoon, Kaufman, Office for State, Tribal, Local and Territorial Support, CDC, & Center for Surveillance,

Epidemiology, and Laboratory Services, CDC, 2013). Further, research is increasingly examining recreational sport as a place where health outcomes can be positive influenced (Stefanovic, 2013). Social capital may relate to overall health outcomes through three primary means. Specifically, as individuals develop the relationships and networks that are indicative of social capital, they are reducing stress, developing access to the resources that will improve their health, and potentially accessing positive health-related behaviors (Folland, 2013; Kawachi & Berkman, 2013). Given the value of social capital in addressing health issues, the potential of recreational sport to address health issues, and the logical relation of SOC and social capital, it makes sense to explore the connection of SOC and social capital in a recreational sport context.

Social Capital Research in Recreational Sport

Sport, and in particular recreational sport, is a promising area for social capital research as the recreational sport experience requires interaction and cooperation among a variety of actors. This is evidenced by data indicating the importance that people place on social interaction in sport. In one survey, 93% of respondents felt that sport was an important way to keep in touch with friends and neighbors, 91% agreed that sport was important in promoting a sense of community, and 82% indicated that social interaction was one of the most important aspects of sport (Tonts, 2005). These beliefs suggest that sport is a logical place to develop social capital.

Various organizations and individuals have also advocated the potential for sport as a tool for community development and the development of social capital. Research has indicated that sport may help to democratize culture, overcome social barriers, and even be a place for radical activism (Hylton & Totten, 2001). As such, community sport has

been used in numerous "sport for development" programs that have been embraced by the United Nations and other development groups. The focus of these programs has primarily been on the development of social capital through sport (Coalter, 2010). Putnam (2000) would agree with this approach as he clearly stated that participation in community sport was evidence of social capital in communities. Community sport appears to be a particular powerful tool in the development of social capital in rural communities, where community sport serves an increased area of focus (Tonts, 2005). The fact that sport has been a focal point for so many groups interested in social capital points to its potential as a concept in this area.

One reason that community sport may be a relevant place for the development of social capital is that sports serve as a social anchor. Social anchors are marked by institutions that support the development and maintenance of social capital at the community level, providing attachment and collective identity for the community. These anchors may take various forms, including schools, sports teams, or cultural events. Social anchors are further defined by providing a connection point for members in the community across racial, gender, or other boundaries. Thus, social anchors help to construct a sense of community, trust, and reciprocation (Clopton & Finch, 2011). These characteristics certainly seem to describe the recreational sport setting.

In addition, Woolcock (2010) suggested that social capital research has been grouped around nine primary themes. These themes include several themes that are directly relevant to community sport programs, including families and youth behavior, schooling and education, community life, and public health. Research on social capital in community sport has the potential to touch many of those areas.

Within recreational sport, the existing research on social capital can be grouped into four general areas – research regarding the development of social capital in youth participants, social capital in adult sport and recreation program participants, social capital and recreational sport volunteers, and social capital in youth sport spectators. Of particular interest to this paper is research related to social capital in adult sport and recreation program participants. This research includes a look at participation in various cultures and types of recreational activities from sport to community gardening. In general, the research supports the notion that social capital may be developed through participation in recreation activities; however, it also cautions that this social capital may not always lead to positive social outcomes.

One of the more thorough treatments related to participation in recreation programs and the development of social capital involved a community gardening program. Although this is not a sport program, this research provides useful insight in to the potential role that adult participation in a recreational activity – whether that be sport or gardening – can have in the development of social capital. The overall theme of the community garden research indicated that social capital can be a benefit or a cost, and that the major factor in this determination is the position that the social actors occupy in the social network. On a positive level, participants in the community garden program recognized that the success of their program depended on the cooperation of other members of the group (Glover, 2004). This recognition can be understood as a norm of reciprocity and trust in the social network. Similarly, volunteers in adult recreational sport programs, such as team captains, often have key roles that are essential to the successful execution of the program, and, therefore, also must understand the importance

of cooperation and trust in the network.

Much like community sport programs, the community garden was also viewed as central to the community life, and central to the development of social capital. This led to a significant amount of dialogue related to the development of the garden, thus opening up opportunities for neighbors to network. This dialog often led to additional interactions outside of the gardening context (Glover, 2004). Likewise, community sport programs are often central to the life a community and may also represent an opportunity for neighbors to network (Tonts, 2005).

Participation in adult recreational sports may also lead to bridging or bonding social capital. This occurrence is exemplified through the experiences of immigrant women participating in sports clubs. Immigrant women found that their participation led to bridging social capital with other immigrants from various ethnicities; however, there was limited bridging across social classes (Walseth, 2008). These findings support Stempel's (2005) assertion that social class has strong associations with adult sports participation. Stempel contends that dominant classes use participation in certain sports to reinforce their positions and distinguish themselves from lower classes (Stempel, 2005). These findings point to the importance of how sport programs must be intentionally designed to assist in the creation of both bonding and bridging capital.

Potential Moderators of SOC: Social Identity, Psychological Involvement, and Behavioral Involvement

Although SOC within a sport context may help to explain variance in social capital, existing research also suggests that the strength of SOC is often related to additional variables relating to both individual cognition and individual behavior. Three

concepts that have been useful in explaining outcomes in sport settings include social identity, psychological involvement, and behavioral involvement.

Social Identity

Although SOC may be a valuable predictor of additional positive outcomes (e.g., increased self-confidence, emotional connections, coping skills, and civic participation; Chavis & Wandersman, 1990; Goodwin, et al., 2009; Greenfield & Marks, 2010), the value of SOC may be dependent on the strength of other variables. For instance, several researchers have noted the importance of social identity with the specific community as relevant to the impact of SOC. That is, the amount that SOC relates to a positive outcome may depend on the degree to which a person identifies with that particular community (Obst & White, 2005; Obst, Zinkiewicz, & Smith, 2002a; Obst, Zinkiewicz, & Smith, 2002b). An individual may feel a strong sense of community within a sport context, but if that community is not important to the individual's social identity, then the impact of that sense of community may be mitigated.

Social identify is "that part of an individual's self-concept which derives from his [or her] knowledge of his [or her] membership of a social group (or groups) together with the value and emotional significance attached to that membership'' (Tajifel, 1978, p. 63). Thus, social identity is inextricably related to the group or community membership. Further, social identity is divided into three factors - centrality, in-group affect, and in-group ties (Cameron, 2004). Centrality represents the frequency with which the group (or community) comes to mind and the subjective importance of the group to the individual; in-group affect refers to specific emotions that occur as a result of membership within the group or community; and in-group ties represents the extent to which individuals feel part

of a particular group or community (Cameron). Although social identity shares similarities with a sense of community, previous research indicates that while social identity helps explain the role of SOC, it is not subsumed within existing definitions of SOC (Obst, Smith, & Zinkiewicz, 2002). Therefore, when looking at the impact of SOC, it is also crucial to examine the importance of the community to the individual as operationalized through his or her social identification relative to the specific community.

Psychological Involvement

Similar to social identity, psychological involvement may help to explain the impact of SOC. Defined as the degree to which an individual's participation in an activity becomes a central component of his or her life (Beaton, Funk, Ridinger, & Jordan, 2011), psychological involvement has been used to explain a number outcomes in recreational and sport settings. For example, Sato, Jordan, and Funk (2014) note that psychological involvement in a recreational sports activity is positively related to life satisfaction, while Chang and Gibson (2011) found a strong relation between psychological involvement and participation in paddling activities.

Psychological involvement is similar to social identity in its focus on salience; however, it focuses on the salience of an activity while social identity focuses on the salience of group membership. Further, while a wide of body of literature exists connecting psychological involvement with outcomes in recreational activities, limited research exists exploring the relationship of psychological involvement with social capital. This void is in spite of the logical connection between psychological involvement and the development of connections that lead to social capital (Brehm & Rahn, 1997). This research addresses this gap by including psychological involvement as a moderator

of the relationship between SOC and social capital.

Behavioral Involvement

While social identity and psychological involvement focus on the personal cognitive elements with a social-cognitive framework, behavioral involvement emphasizes the action (behavioral) component. Logic suggests that behavioral involvement in a particular activity or community will also influence the development of social capital. In other words, the more a person is involved within a particular community, the more likely he or she will be to develop the networks indicative of social capital. Further, behavioral involvement is also theoretically consistent with an investment in the membership of the group (McMillan, 2011; McMillan & Chavis, 1986). However, other research has failed to demonstrate a link between behavioral involvement and social psychological outcomes. Specifically, in a study of runners, behavioral involvement did not emerge as a significant predicator of quality of life outcomes (Sato, Jordan, & Funk, 2014). Thus, it may be that behavioral involvement helps explain feelings related to the particular group (e.g., SOC), but may fail to explain larger outcomes such as social capital. Given the ambiguity related to behavioral involvement and its influence on other outcomes it is, therefore, important to continue to examine if this construct relates to additional social and psychological outcomes.

Conclusion and Future Directions

The purpose of this chapter was to lay an empirical and logical foundation for the further exploration sense of community in adult recreational sport settings. Specifically, this chapter discusses the importance of the adult recreational sport context, SOC as a

valuable construct that may emerge in connection with participation, gaps in the literature related to specific mechanisms that relate to SOC, and social capital as a potential additional outcome related to SOC.

While a body of literature has explored these constructs in sport settings, research has not examined the specific links discussed in this study. Therefore, it is important to not only empirically examine these relations, but also to use multiple methods to further our understanding of SOC in adult recreational sport settings. The use of multiple methods gives the researcher the advantage of leveraging the strengths of both quantitative and qualitative approaches (Creswell, 2014; Creswell & Plano-Clark, 2011). A more detailed and nuanced understanding of factors within an adult recreational sport setting that may facilitate SOC will help sport program administrators to design programs that are more likely to achieve this aim.

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CHAPTER 3

THE RELATION OF ACHIEVEMENT GOAL ORIENTATIONS TO SENSE OF COMMUNITY AMONG PARTICIPANTS IN AN ADULT RECREATIONAL FLAG FOOTBALL LEAGUE: A MULTILEVEL PERSPECTIVE

Introduction

It is no secret that the United States is facing an obesity crisis. Recent statistics indicate that over one-third of U.S. adults are obese (Ogden, Carroll, Kitt, & Flegal, 2014). With obesity linked to a number of health risk factors, addressing this issue is the focus of many public health movements (Ogden, et al.). Participation in adult recreational sport programs may lead to increased physical activity and, thus, a potential reduction in obesity (Eime, Charity, Payne, Young, & Harvey, 2013). Therefore, increasing participation in adult recreational sport programs presents an opportunity to address the obesity crisis. However, as recreation and sport professionals, it is imperative that we understand more about participation, benefits that participants receive from involvement, and how those benefits develop. Understanding specific elements of the experience and factors that relate to those elements can help us design programs that encourage positive benefits and ultimately increased participation.

The development of a sense of community (SOC) is one positive outcome that may emerge from participation in a recreational sport program. SOC is important as it is

linked to a number of positive indicators of well-being such as increased self-confidence increased emotional connections (Goodwin, et al., 2009), and increased feelings of empowerment (Greenfield & Marks, 2010). Perhaps most importantly for recreation and sport managers, the feeling of SOC correlates to increased participation in community programs (Peterson & Reid, 2003). That is, individuals who feel a higher SOC are more likely to participate in community programs, such as recreational sports. Therefore, a better understanding of predictors of SOC can assist recreational sport manager in developing programs that actively seek to create this outcome.

It is clear that SOC often develops within sport settings and that sport settings represent a particularly relevant area in which to study SOC (e.g., Lyons & Dionigi, 2007; Warner & Dixon, 2011; Warner & Dixon, 2013). Several researchers suggest that the development of SOC is shifting away from geographical communities to communities of interest, such as recreational sports (Putnam, 2000; Schadel & Stout, 2012; Warner, et al., 2012). In contrast to a strictly geographical area, communities of interest represent communities where individuals gather around a common interest or activity. Previous research indicates that sport participation does represent an area where communities develop around the common interest of sport (Warner, Dixon, & Chalip, 2012). Thus, participation in recreational sports is a promising venue where SOC may be cultivated.

Previous research also suggests links between participation in recreational sports and SOC. Allen (2003, 2005, and 2006) noted that sport can be a place to satisfy psychological needs for connection and belonging. This research points to a connection between sport participation and the development of SOC; however, although Allen's research linked sport participation to a perceived sense of belonging, it lacked a

theoretical grounding in sense of community. This research seeks to address a gap in the literature by grounding the outcomes in theories of sense of community.

Not only does sport represent a place where SOC may develop, but the development of SOC in a sport setting may extend beyond the boundaries of a particular team. For example, participation in recreational sports in collegiate settings often enhances the participants' SOC with the larger campus community (Warner & Dixon, 2012b). Indeed, participation in recreational sports offers an opportunity to interact with individuals beyond one's own team. Thus, participation in recreational sports may lead to SOC not only at the team level, but also within the league or larger community (e.g., campus or neighborhood).

While sport settings provide a particularly germane opportunitiy to develop SOC, it is also clear that SOC does not automatically result from these settings, but must be actively managed and faciliated (Chalip, 2006; Rosenblatt, Cheshire, & Lawrence, 2009; Warner & Dixon, 2011). Although previous research links recreational sport participation to the development of feelings of belonging and community, missing from the literature is an understanding of the specific mechanisms within sport that enhance the cultivation of community. It is, therefore, essential to better understand relevant factors within a recreational sport setting that can enhance SOC to assist sport administrators in designing programs that lead to SOC.

Theoretical Framework

Although the general construct of sense of community emerged in the mid-1970s from the seminal work of Sarason (1974), the work of McMillan and Chavis (1986) represents the elaboration of the theory. McMillan and Chavis define a psychological

sense of community (SOC) as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9). SOC is comprised of four general elements - membership, influence, integration of fulfillment of needs, and shared emotional connection. Each general element includes multiple subelements and the interaction of all elements creates an overall feeling of SOC. Since the original conception of this theoretical approach, research has demonstrated its utility in multiple settings, including communities of interest as well as geographic communities (e.g., Goodwin, et al., 2009; Obst et al., 2002a; Obst, et al., 2002b; Obst & Stafurik, 2010; Obst & Tham, 2009; Sayer, Beaven, Stringer, & Hemena, 2013).

As noted, SOC consists of four interacting elements. More specifically, membership refers to the general feeling that one belongs as part of the group (McMillan, 2011; McMillan & Chavis, 1986). Membership is comprised of boundaries, emotional safety, and a sense of belonging. These subelements develop membership by clearly demarcating who is and who is not part of the community, providing a safe space within the community, and creating a feeling and awareness of being part of the community. Influence operates in a bidirectional manner. That is, the community influences individual members and individual members influence community norms (McMillan & Chavis). Members earn influence through a personal investment or sacrifice to be part of the community (McMillan). Integration and fulfillment of needs refers to the idea that strong communities meet the needs of their members and reinforce that need fulfillment through status, success, and competencies of other members (McMillan). Finally, SOC includes a shared emotional connection, which is created when members share time

together around events that include drama, closure, and recognition of members (McMillan & Chavis). This shared emotional connection also becomes symbolized in shared rituals, traditions, symbols, and a sense of a shared history (McMillan).

As the existing literature abounds with various constructs related to community, it is important to distinguish SOC from other popular approaches related to community, including social capital and group cohesion (Kramer, Seedat, Lazarus, & Suffla, 2011). Although social capital is theoretically distinct from SOC, the two concepts do overlap and are sometimes used interchangeably (Sengupta, et al., 2013). Broadly, social capital is defined as the value of social networks and bringing people together (Putnam, 2000). Thus, social capital focuses on social systems. Conversely, SOC focuses on a particular feeling that emerges from social relationships and not the utility of those relationships.

Similarly, group cohesion shares elements of and may help to predict SOC (Breunig, et al., 2008; McMillan, 2011). Unlike SOC, however, group cohesion is often more focused on a task and may not necessarily have any relational component (Carron, Brawley, & Widmeyer, 1998; Keyton, 1999). Thus, a person experiencing group cohesion may be more interested in the task of the group and the related outcomes than feelings about other group members (Keyton). In contrast, SOC focuses on the individual feeling toward the group and does not require a common task focus (Pretty, et al., 1994).

Developing SOC: An Achievement Goal Perspective

Chalip (2006) suggested that sport could serve the important function of creating positive social impact, including community development. However, in order to maximize the potential of sport, it is imperative to examine the specific means by which sport leads to positive social outcomes. In achievement-oriented settings (e.g., sport, the

classroom), research points to the salience of dispositional goal orientations in explaining positive social outcomes.

Dispositional goal orientations represent the central tenant of achievement-goal theory (AGT; Roberts, 2012). AGT proposes that in achievement-oriented settings, individuals are primarily motivated to demonstrate competence. An individual's perception of success, however, differs based on his or her definition of competence. Specifically, an individual may define competence through self-referenced criteria (task-orientation) or other-referenced criteria (ego-orientation). When a person uses self-referenced criteria, he or she seeks to demonstrate competence only in reference to his or her own self (Roberts, 2012). For example, a football player with a task-orientation would perceive success if he or she had a career high in receiving yardage, even if his or her team lost the game. Conversely, a person with an ego-orientation would seek to demonstrate competence in reference to the performance of others. In this case, a football player with an ego-orientation would perceive success if he or she outplayed his or her opponent, regardless of whether or not he or she played well.

A substantial body of literature has demonstrated the utility of achievement-goal theory in explaining variance in outcomes, including social outcomes. Two links are particularly apt for this study. First, research links task-orientation to a belief that success requires collaboration with peers (Duda & Nicholls, 1992, Harris, Yuill, & Luckin, 2008; Roberts, 2012; Viira & Radusepp, 2000). That is, individuals who have a higher task-orientation are more likely to believe that working together as a group is essential to success. Thus, these individuals would appear more likely to develop cohesion and community while working together.

In addition, task orientation is linked to a feeling of relatedness (Shen, McCaughtry, Martin, & Fahlman, 2009; Wang, Biddle, & Elliot, 2007). Deci and Ryan (2004) define relatedness as the desire to be connected to others, to care for them, to be cared for by them, and to sense a feeling of belonging with them. When combined with previous links to beliefs about cooperation, together these findings suggest a link between task orientation and SOC. More pointedly, an individual with a higher task-orientation would appear likely to experience higher levels of SOC.

Although most conceptions of AGT focus on task and ego-orientations, some researchers have proposed that social goal orientations may be equally useful in explaining variance in outcomes (Allen, 2003, 2005; González-Cutre, Sicilia, Moreno, & Fernández-Balboa, 2009; Hodge, Allen, & Smellie, 2008). If a participant has a dispositional social goal orientation, that person defines the achievement of competence as gaining the approval of others (Allen, 2003). Similar to an ego-orientation, the criteria is other-referencing. However, for a person with a social goal orientation, the details of the performance are irrelevant. An individual could gain social approval from playing well or from defeating an opponent. Thus, a social goal orientation represents a distinct construct from task or ego-orientations.

Previous research identified correlations between social achievement goals and positive outcomes such as sportsmanlike play (Stuntz & Weiss, 2003), effort (Guan, McBride, & Keating, 2013), interest (Allen, 2003), and perceived belonging (Hodge, Allen, & Smellie, 2008). These relations are consistent with elements of SOC. For example, sportsmanlike play may result from a community norm endorsing sportsmanlike play. Effort and interest represent a form of investment or dues paid to

belong, components that influence both membership and influence within the SOC theoretical framework (McMillan, 2011). Further, perceived belonging corresponds to the sense of belonging that is inherent in the membership element of SOC (McMillan, 2011). Finally, a social goal orientation conceptually relates to the influence component of SOC. In other words, a person who seeks approval of the community as validation of competence is influenced by the evaluations of the community.

Achievement Goals in a Recreational Sport Context

Achievement goal theory is rooted firmly in a social-cognitive tradition (Bandura, 2006). Social-cognitive theory proposes that both individual cognitive level factors and social-environmental factors influence individual outcomes. Dispositional achievement goal orientations represent individual cognitive level factors. Of critical importance to a fuller explanation of the role of achievement goals to SOC is a recognition that while dispositional goal orientations are generally stable, one's current involvement is dynamic and can change at any given moment (Gernigon, d'Arippe-Longueville, Delignieres, & Ninot, 2004). That is, in any given situation, a person may be either task-involved or ego-involved. For example, a person may generally be task-oriented, but when participating in a flag football league, he or she is ego-oriented. Thus, situational factors moderate the influence of the goal orientation (Dweck & Leggett, 1988).

Research supports the assertion that considering both individual and situational factors improves our understanding of the sport context (Roberts, 2012). For example, Kavaussanu and Roberts (1996) found that both individual goal orientations and the perceived motivational climate were equally important predictors of intrinsic motivation and Treasure and Roberts (1998) found significant interactions between individual goal

orientations and perceptions of the motivational climate among female basketball players. It is clear, therefore, that social situational factors are important as well as individual factors in predicting outcomes.

Consistent with social-cognitive theory, some researchers have suggested that not only are both situational and person factors important in explaining behavior, but the interaction of those two factors may help explain even more variance. In line with this thinking, the compatibility hypothesis proposes that individuals benefit more from an environment that is consistent with their particular goal orientation (Papaionnou, Marsh, & Theodorakis, 2004). That is, the relation of individual orientations to the outcome is likely to be stronger when social situational factors match the person's orientation. For example, according to the compatibility hypothesis the relation of a high task-orientation for an individual will likely be stronger if that individual is on a team with a high task-orientation.

Although research examining both individual goal orientations and perceptions of the social climate help shed light on outcomes, most research continues to focus on individual level perceptions. However, Papaioannou and colleagues (2004) argued that goal orientations are ultimately a group-level construct and that it is inappropriate to pool individual level responses without regards to groups (teams). Viewing the data from only an individual level perspective ignores the unique effect that teams have on individual outcomes. This is especially true in adult recreational sport settings where individuals often participate for social reasons, suggesting that the influence of peer teammates is likely to be strong.

Participation in recreational sport programs represents an important avenue to not

only increase physical activity and physical health, but also improve community well-being (Priest, Armstrong, Doyle, & Waters, 2008). However, while it is apparent that sport may enhance SOC, it is unclear the specific mechanisms by which programs can be designed to positively influence this outcome (Chalip, 2006). Both the literature and logic point to a connection between achievement goal orientations and SOC. Notwithstanding this logical connection, no study has specifically examined the link between these orientations and SOC. Therefore, the primary purpose of this study was to examine the link between achievement goal orientations and SOC. In addition, while individual achievement goal orientations may help explain variance in SOC outcomes, this analysis risks ignoring team-level effects on individual outcomes. Thus, the secondary purpose of this study was to examine relations between aggregate team goal orientations and SOC and interactions between team level orientations and individual orientations.

This study tested three propositions and seven corresponding hypotheses. (See Figure 3.1.)

Proposition 1: Individual dispositional goal orientations will have a significant relation to SOC.

H1: Individuals who have a higher task orientation will report higher SOC.

H2: Individuals who have a higher ego orientation will report lower SOC.

H3: Individuals who have a higher social orientation will report higher SOC.

Proposition 2: Aggregate team dispositional goal orientations will have a significant relation to SOC. (See Figure 3.2.)

H4: Individuals who are on teams with higher average task orientations will report higher average SOC.

H5: Individuals who are on teams with higher average ego orientation will report lower average SOC.

H6: Individuals who are on teams with higher average social orientation will report higher average SOC.

Proposition 3: Aggregate team dispositional goal orientations will moderate the effect of individual goal orientations.

H7: There will be a significant interaction such that the effect of individual goal orientation on SOC will depend on the aggregate team goal orientation.

Method

Participants and Procedure

Participants in this study were players in an adult recreational flag football league located in the Intermountain region of the United States. Data were intentionally collected near the end of the league season to allow SOC to develop.

Prior to the start of the study, researchers contacted the league administrators to obtain their agreement and willingness to participate in the research project and then researchers obtained IRB approval. The primary researcher then visited game sites on five different occasions to collect data from league participants. Participants were approached, either prior to or immediately following their games, and were asked to take part in the study. A full team could consist of as few as five players. Participant recruitment yielded 155 participants within 40 teams. The sample was overwhelmingly male (94%) and White (86%); with a majority (51%) earning less than $50,000 a year in annual household income.

Measures

A comprehensive questionnaire was designed to meet the specific objectives of this study. The questionnaire included 8-items from the Brief Sense of Community Scale (BSCS; Peterson, Speer, & McMillan, 2008), 11-items from the Perceptions of Success Questionnaire, Adult Version (POSQ; Roberts, Treasure, & Balaque, 1998), 4-items intended to measure social goal orientations, and additional questions related to demographics and number of years spent on the team.

Sense of community. Sense of community was evaluated using the Brief Sense of Community Scale (BSCS). Prior research developed the BSCS as a shorter alternative to the 24-item Sense of Community Index-2 (Chavis, Lee, & Acosta, 2008). The BSCS is based on the theory of psychological sense of community as developed by McMillan and Chavis (1986), includes 8-items, and loads on to a single factor of overall sense of community. The purpose of developing a brief measure was to have an empirically validated scale that could be easily incorporated in to community-based research (Peterson, Speer, & McMillan, 2008). Previous studies have used the BSCS with a variety of populations (e.g., Peterson, Speer, & McMillan, 2008; Wombacher, Tagg, Burgi, & MacBryde, 2010) and have demonstrated this scale to have high internal consistency (ranging α =.77 to α = .92) and convergent validity with expected items of community participation, empowerment, mental health, and depression (Peterson, Speer, & McMillan, 2008). The BSCS asks respondents to rate their agreement with statements on a Likert-type scale ranging from strongly agree to strongly disagree. Sample items include, "I belong in this community", and "I can get what I need in this community." Internal consistency of the BSCS for this study was also high (α =.90).

Dispositional goal orientations. The questionnaire assessed dispositional goal orientation through 11-questions from the Perceptions of Success Questionnaire, Adult Version (POSQ; Roberts, Treasure, & Balaque, 1998), with an additional 4-questions related to social goal orientations. This questionnaire asks participates to assess, on a 5-point Likert-type scale, what makes them feel successful when participating in the league. Each item begins with the stem, "When playing in this league, I feel most successful when …" Sample items include "I show other people I am the best," "I reach personal goals," and "I make friends I can confide in." Internal consistency for the three-subscales in this study was acceptable; e*g*o orientation (α =.78); task orientation (α =.84), and social orientation (α =.78).

Team level data. In order to assess the influence of the situation, aggregate scores were calculated for each team. Previous research has indicated the appropriateness of this aggregation technique as a proxy for a situational (group-level) factor (Mujahid, Roux, Morenoff, & Raghunathan, 2007).

Covariates. It is important to adjust for individual differences that may influence individuals' responses but may not be directly relevant to the research questions at hand. For this reason, gender, income, and number of years spent playing in the league were included as covariates due to previous findings suggesting that these factors may influence SOC (Brodsky, O'Campo, & Aronson, 1999; Lambert & Hopkins, 1995; Legg, Wells, & Barile, 2015).

Results

A multilevel modeling (MLM) approach was used for data analysis. Multilevel modeling is well suited for this study for four reasons: (a) it takes in to account the

hierarchical nesting of the data consisting of data from individuals within teams; (b) it is able to consider the team as a random factor; (c) it allows for within team and between team correlations to be modeled simultaneously; and (d) it uses estimation procedures that are robust for unequal sample sizes within teams (Raudenbush & Bryk, 2002).

All analyses were carried out using Mplus v7.1 statistical software (Muthen & Muthen, 2013). A full-information, robust maximum-likelihood estimator (mlr) was applied to obtain parameter estimates and standard errors robust to non-normality. Multilevel estimation techniques that include both individual and team-level predictors were used. Multilevel modeling was used because participants were clustered within teams. Furthermore, it was believed that individual level effects would differ from those found at the team level.

All missing data were addressed using multiple imputations (for more information on the appropriateness of the method, see Schafer & Graham, 2002). All results correspond to the pooled estimates of 20 imputed datasets. The highest percentages of missing data were associated with the covariates of income (12%), years participating in the league (16%), and the dependent variable, sense of community (14%). Missing data on all other variables ranged from <1% to 3%. Notable intraclass correlations were found for all independent variables (ego orientation = .12; task orientation = .17; social orientation = .07) and the dependent variable (sense of community = .09). Team level associations were tested using aggregates for each of the individual level predictors (i.e., the average score for members of each team).

Multilevel models with cross-level interactions were tested in order to determine

whether dispositional orientation was associated with SOC at either the individual or the team level. The cross-level interactions assessed whether individual level associations between orientation and sense of community were dependent upon the aggregate level of team orientation. All team level scores and the covariates (income and years on the team at both levels) were grand mean centered. The individual level orientation variables (i.e., ego, task, and social orientation) were group mean centered. Group mean centering of individual variables included in cross-level interactions has been found to minimize the chance of spurious results and reduce bias (Enders & Tofighi, 2007). Descriptive statistics are reported in Table 3.1.

Two models were tested. The first model included the individual level orientation predictors of ego, task, and social. This model also included the team level orientation predictors and the cross-level interactions between each of the individual and team level orientation predictors. A second model was then tested that removed the social orientation predictors from the model. This model was tested due to concerns regarding high correlations (i.e., multicollinearity) between task and social orientation at the individual (r = .39) and at the team level (r = .57). The second model resulted in improved fit (Model 1: *AIC* = 996. 35, *BIC* = 1072.44; Model 2: *AIC* = 992.87, *BIC* = 1044.61; lower *AIC* and *BIC* represent a better fitting model). Therefore, because the second model fit the data better, reduced the chance of multicollinearity between the predictors, and was more parsimonious, results of the second model are presented. The choice to not include social goal orientations is also consistent with current explications of achievement goal theory that include only task and ego-orientations (Roberts, 2012).

Results of model 2 are presented in Table 3.2. At the individual level, ego orientation was found to be significantly negatively associated (p = .031) with sense of community (i.e., the greater an individual's ego orientation, the lower his or her perceived sense of community). The relation of task orientation at the individual level to SOC was not found to be statistically significant (p=0.51). However, at the team level, the main effect of task orientation was found to be positively associated with sense of community (p= .047). Team level task orientation was also found to moderate the individual level association between ego orientation and sense of community (p = .032).This suggests that the negative association between individual ego orientation and sense of community is reduced or buffered by team task orientation. This association is graphically represented in Figure 3.3.

Discussion

The primary purpose of this study was to examine the link between achievement goal orientations and SOC. A secondary purpose was to examine relations between aggregate team goal orientations and SOC and interactions between team level orientations and individual orientations. In order to accomplish these purposes, three general propositions and seven hypotheses were tested. Each of the three propositions was partially supported.

Proposition one stated that individual dispositional goal orientations would have a significant relation to SOC. Specifically, we hypothesized that task and social-orientations would have a positive significant relation to SOC (H1 and H3), while ego-orientation would have a negative relation to SOC (H2). The results support a negative

relation between individual ego-orientation. As individual ego-orientation increases, SOC decreases. However, the tested relation hypothesized in H2 did not reach statistical significance (p =.051). As noted in the results, social orientations were dropped from the model due to concerns of multicollinearity.

These findings are consistent with previous research that concluded that task-orientations correspond primarily to positive adaptations, while ego-orientations correspond primarily to negative adaptations (Roberts, 2012). In addition, these findings extend our understanding of dispositional achievement goal orientations to include the dependent variable of SOC. It is likely that when participants define competence through ego-involved criteria, they are less likely to feel a sense of membership and belonging when the majority of members in the community represent obstacles to achieving competence.

Proposition two addressed relations at the team (aggregate) level. A number of authors have suggested that research related to goal orientations needs to consider the effects of the team (e.g., Papaionnou, et al., 2004; Roberts, 2012). Despite these suggestions, the majority of research related to goal orientations ignores team level effects. Thus, this research makes an important contribution to the literature by including aggregate team orientations.

Proposition two was partially supported. Individuals on teams with higher average task-orientation also reported higher average SOC. Although this relation is significant in the predicted direction, it is worthwhile to note that the individual level task-orientation was not significant while the team level orientation did achieve significance. This finding points to the importance of common goal orientations in team settings. That is, the

average team orientation was more strongly related to SOC than the individual orientation. These data also lend indirect support for the influence component of SOC. A higher team average orientation could point to the team community influencing other team members to adopt a similar task-involvement. Hypothesis five was not supported, as there was no statistically significant relation between team ego-orientation and SOC. This lack of a significant finding is not entirely surprising as it is consistent with a number of other studies that found no significant relations between ego orientations and outcome variables (Roberts, 2012).

Finally, in order to assess proposition three and hypothesis seven, cross-level interactions were tested. Hypothesis seven proposed that there would be significant cross-level interactions such that the relation of individual goal orientations would depend on the average team orientation. Similar to previous research, the results were informative, but largely not statistically significant with one important exception. The results point out that team level task-orientation buffers individual level ego-orientation. That is, if an individual is high in ego-orientation, but on a team that is high in task-orientation, he or she is more likely to feel higher SOC than if he or she was not on a team with high task-orientation. In fact, when individuals are on teams with an average task-orientation that is at least one standard deviation above the mean, there is no longer a statistically significant negative relation between individual ego-orientation and SOC. This finding lends indirect support for a compatibility hypothesis (Papaionnou, et al., 2004). The compatibility hypothesis proposes that individuals benefit more from an environment (represented by the overall team average score) that is consistent with their particular orientation. In this case, there is not compatibility, but a buffering effect of

incompatibility. That is, when the team average is higher on task-orientation, the relation of individual ego-orientation is mitigated. This result is consistent with other studies that reported negative effects of incompatibility in classroom settings (Diggelidis, Papaioannou, Laparidis, & Christodoulidis, 2003; Papaionnou, et al., 2004). In other words, an environment that is not consistent with the individual orientation reduces the expected effects of the individual level orientation.

These outcomes not only provide valuable information related to the importance of person-situation fit, but they also lend support for continued use of multilevel techniques in research in sport settings. Team-level analyses yielded two key conclusions. First, average task-orientation at the team-level was a significant predictor of individual SOC. This points to the value of team-level data providing additional relevant information. Second, the strength of group level orientations can mitigate the impact of individual orientations. The uniqueness of these conclusions yields strong support for continued use of multilevel modeling techniques in analysis.

Theoretical Implications

This study furthers our understanding of social-cognitive theory and specifically achievement-goal theory. Bandura's (1986) seminal work noted the importance of both situational factors and individual cognitive factors. In this study, both individual factors (individual goal orientations) and situational factors (aggregate team orientations) help explain variance in the outcome variable. More specifically, through the use of multi-level modeling, this study demonstrates that not only do both individual and situational factors matter, but their relation with each other matters. That is, the relation of an individual factor to an outcome may change depending on the particular situation.

Similarly, this research expands our understanding of achievement goal theory by providing evidence that the overall strength of a group's aggregate goal orientations may influence individual outcomes. That is, the situation matters, and in this specific case, aggregate goal orientations in team settings matter. These findings provide further support for the use of multilevel modeling techniques in team sport settings, and specifically in studies utilizing achievement-goal theory. Although prior research has suggested the importance of this approach (Papaionnou, Marsh, & Theodorakis, 2004), the majority of research pertaining to achievement-goal theory continues to ignore group level effects (Roberts, 2012). This research points to the importance of using multilevel techniques in order to further enhance our understanding of the theory.

Implications for Practice

For recreational sport managers, it is important to recognize that achievement-goal involvement may be different depending on the given situation. Although an individual has an orientation towards a task-and/or ego-involved approach, elements of the particular situation influence the particular task/ego involvement at a given time. Given the negative relations of ego-orientations to SOC at the individual level and the positive relations of task-orientations at the team level, it is, therefore, crucial that managers create an environment that discourages an ego-involvement and encourages task-involvement. Epsetein (1998) proposed the TARGET method as a means for influencing achievement-goal orientations. Specifically, managers can address elements related to task, authority, recognition, grouping, evaluation, and time as means to influence goal-orientations. Ames (1992) further developed this concept to specifically address how interventions can change the overall climate, thus influencing individual

goal orientations. For managers of adult recreational sport programs, task-orientations could be encouraged by giving participants authority to help develop the program structure. For recognition, managers could provide rewards for most improved or hardest working teams and individuals. For grouping, managers could provide opportunities for individuals to participate with other members in the league. In addition to the regular season schedule, managers could offer a "hat" tournament where individuals dropped their name in a hat and teams were randomly drawn (see www.wafc.org for an example). Each of these methods encourages the adoption of task-involvement and discourages ego-involvement. By using the TARGET method, managers can create an environment that maximizes the likelihood of task-involvement, and, thus, the creation of SOC.

Limitations

Several limitations may affect both the interpretation of results and the generalizability of the results to other populations. These limitations include the timing of survey administration, a lack of a diverse population, and the inability to make causal inference.

Limitations may exist due to the timing of the survey administration. Most potential participants were approached following their participation in league games. As such, participants affect and thoughts were undoubtedly influenced by the results of the game they had just played. This may skew the results differently than if the survey had been administered at a time more distal from the game result.

Another limitation relates to the demographics of the assessed population. The study sample consisted primarily of White males. Thus, it is not immediately clear if the results would be similar with other populations.

Although the study did not produce significant findings pertaining to the relation of social goal orientations to SOC, this may be a result of the social goal questions. Future studies should consider using the more robust Social Motivation Orientations in Sport Scale in order to gather a stronger measure of social goal orientations (SMOSS; Allen, 2005). Similarly, while the use of the BSCS did yield valuable results, this scale only allowed for testing of the relation to overall SOC, and did not allow for testing of relations to the various subelements of SOC.

Due to the cross-sectional nature of this study, limited causal inferences may be made. For example, it may be that achievement goal orientations are a result of existing community norms. The theory of SOC notes the importance of the community influencing community members. In this case, the SOC could be influencing the particular goal orientation rather than the other way around.

Conclusion and Future Research

In conclusion, participation in adult recreational sports may be one way to address the current obesity crisis in the U.S. In order to increase participation, however, it is essential that we understand the benefits that participants derive from their experience and the specific mechanisms that influence those benefits. This paper addresses this issue at both the individual and situational (team) level through the lens of achievement-goal theory and sense of community. Specifically, this research sought to examine the relation between both individual achievement goals and aggregate team achievement goals and sense of community. Results support the general notion that task-orientations are more likely to correspond with positive social outcomes, specifically sense of community. The results also point towards the importance of aggregate team-level orientations, thus

providing support for the importance of situational factors.

Future research should continue to explore this question through multilevel analysis. Measuring individuals' perceptions of the overall climate would also enhance the results by assessing salient elements within the environment that influence task-involvement. Environmental cues are generally easier for program administrators to adapt and so are particularly worthwhile to explore due to the practical implications. Identifying specific program design elements that influence SOC will help sport administrators design programs to improve SOC. Finally, future research should utilize participants that are more diverse across a variety of sports in order to expand these findings to multiple settings.

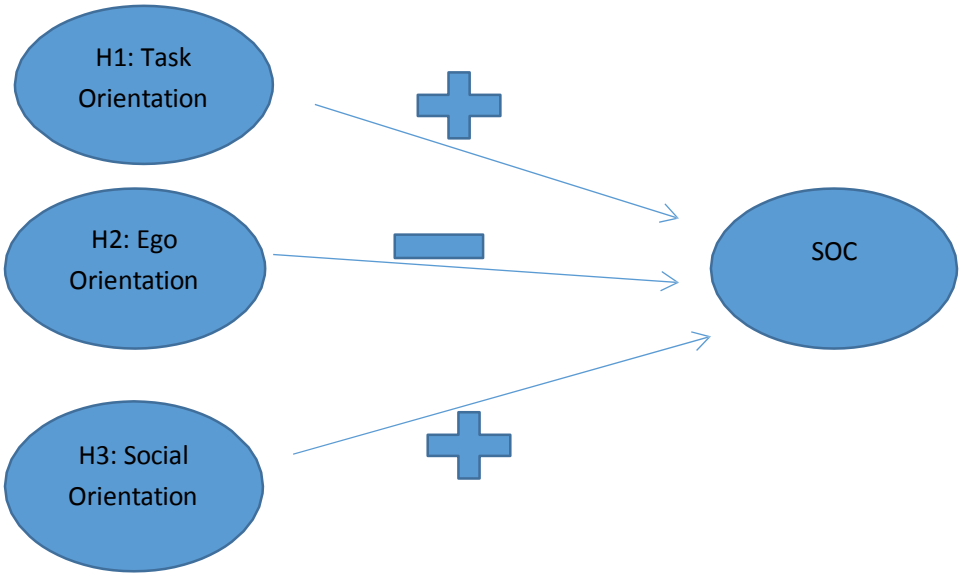

Figure 3.1. Proposition 1 Hypotheses

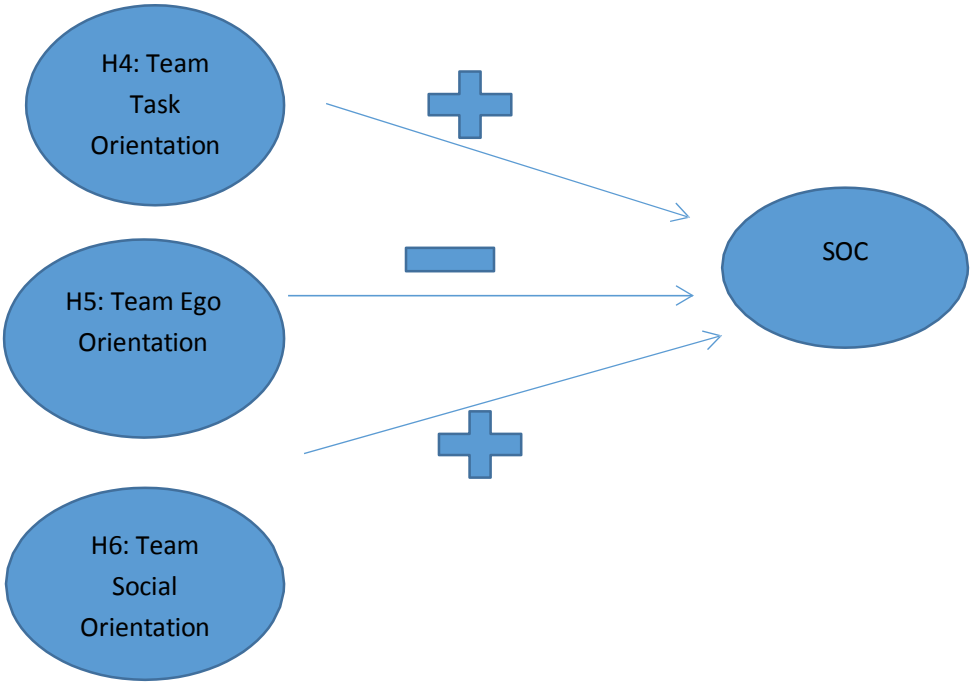

Figure 3.2. Proposition 2 Hypotheses

Table 3.1. Descriptive Statistics for Independent and Dependent Variables

Variable	*N*	*M*	*SD*
Independent Variables Level 1 (Individual)			
Task Orientation	151	4.39	0.61
Ego Orientation	150	3.62	0.86
Social Orientation	154	3.99	0.83
Level 2 (Team Aggregate)			
Task Orientation	40	4.39	0.41
Ego Orientation	40	3.61	0.49

Table 3.2. Multilevel Associations between Dispositional Goal Orientation and SOC

	Sense of Community		
	b	*SE*	*p*
Individual Level			
Income	0.37	0.49	.449
Years on Team	0.05	0.28	.852
Ego Orientation	-0.23	0.11	.031
Task Orientation	0.42	0.21	.051
Team Level			
Average Income	0.44	0.74	.552
Average Years on Team	-0.08	0.33	.820
Ego Orientation	0.31	0.18	.087
Task Orientation	0.48	0.24	.047
Cross-level Interactions			
Ind. Ego X Team Ego	0.02	0.03	0.457
Ind. Ego X Team Task	0.08	0.04	0.032
Ind. Task X Team Ego	0.09	0.05	0.065
Ind. Task X Team Task	0.07	0.15	0.646

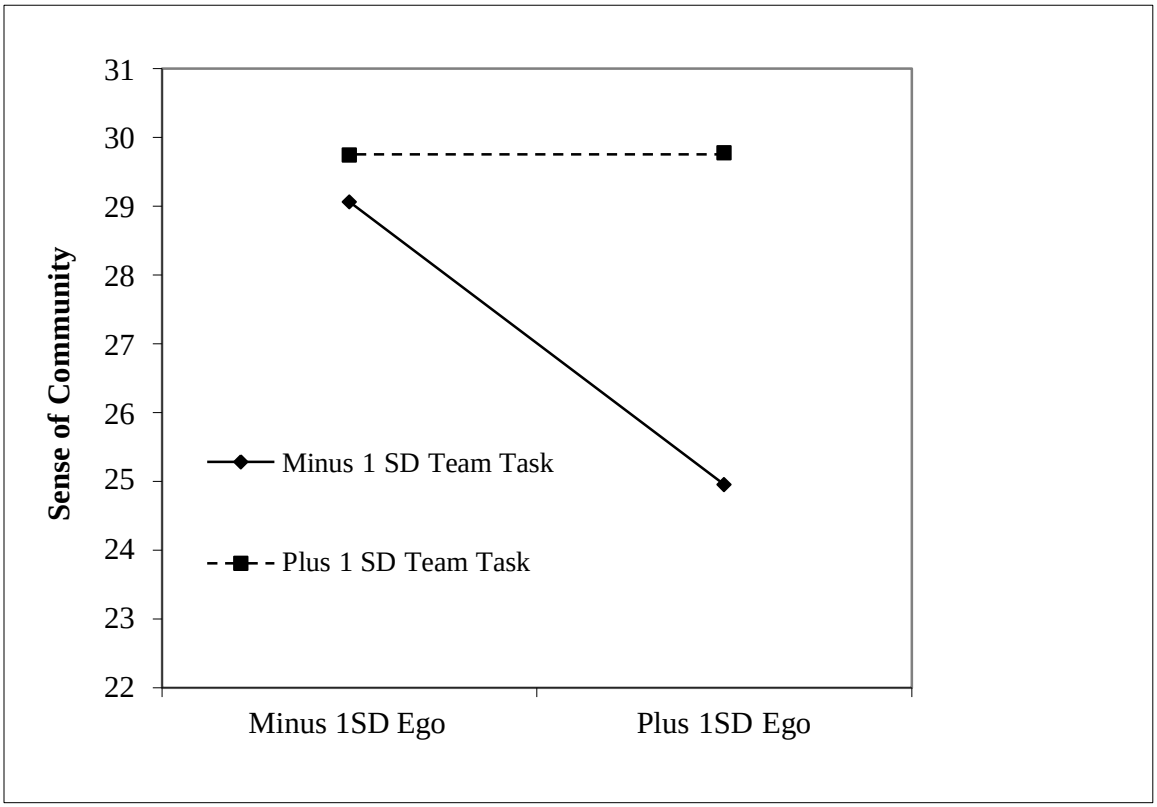

Figure 3.3. Interaction between team task orientation and individual ego orientation

This figure represents the association between ego orientation and overall sense of community for individuals that are on teams that have average task orientations one standard deviations above or below the overall mean. Low team task orientation represents one standard deviation above the sample mean and high team task orientation represents one standard deviation above the mean.

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CHAPTER 4

EXPLORING THE PERCEIVED MEANING OF PARTICIPATION IN ADULT RECREATIONAL TENNIS LEAGUES

Introduction

Social motives assume a crucial role in the decision of many adults to participate in recreational sports. Indeed, existing research identifies social motives along with health, business, and entertainment as primary motives for adult participation (Youn-Lim, et al., 2011). Participation may also lead to a number of social benefits, including improved social functioning, higher life satisfaction, higher sense of belonging, improved well-being, reduced stress, and the feeling of a sense of community (Eime, Charity, Payne, Young, & Harvey, 2013; Warner, Dixon, & Chalip, 2012). Although it is clear that social reasons are of primary importance, it is also apparent that various sports settings are unique, and individuals may experience sports contexts differently (Warner & Dixon, 2011). Further, limited research exists that seeks to understand the meaning that participants ascribe to their own experiences within a recreational sport context and whether they view the social benefits as meaningful.

Recreational tennis represents a sport context that provides a different experience from other recreational sports, and may be an important area to explore. Recreational league tennis presents a popular sport that may be played across the lifespan, and is also

unique compared to other sports given its combination of individual and team play. In recreational league tennis, participants play individual matches which then count towards a total team score. Nearly 20 million Americans participate in tennis, and tennis represents a $5.5 billion industry within the U.S. alone (Tennis Industry Association (TIA), 2013). Further, league tennis has demonstrated strong growth, exhibiting 7% increase in participation in the most recent year (TIA, 2013). Finally, tennis is often considered a "lifetime sport," meaning individuals can participate throughout their lifespan, thus making recreational tennis an important context given its touch points to individuals across the lifespan.

Sense of Community

Given existing research supporting the social motives of adult participants in recreational sports (Youn-Lim, et al., 2010) and a substantial body of literature describing the development of SOC in adult sports (e.g., Goodwin, et al., 2009; Warner, Dixon, & Chalip, 2012), we chose to use theories of SOC as sensitizing concepts to our research. Sensitizing concepts represent starting points for qualitative research and provide guidelines for research in specific settings (Bowen, 2006; Glaser, 1978; Padget, 2004). They do not represent hypotheses, but merely lay the foundations for the analysis of the data (Bowen). The following paragraphs will briefly describe two theories of SOC that formed a basis for our analysis.

The concept of sense of community initially emerged from the field of community psychology in 1974 when Sarason suggested that the study of a sense of community should be the central organizing idea in the new field of community psychology (Sarason, 1974). Despite this ambitious suggestion, the idea meandered through the literature until

McMillan and Chavis proposed the theory of a SOC, sometimes referred to as a psychological sense of community (McMillan & Chavis, 1986). SOC may be defined "as a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986, p. 9). According to this theory, SOC is developed through the interplay of four elements: membership, need fulfillment, influence, and shared emotional connection (McMillan & Chavis; McMillan, 2011). Although this remains the most commonly used theoretical approach in research related to SOC, the theory sparks continued debate as to its basic components and predictive qualities (Nowell & Boyd, 2011; McMillan). In addition, numerous other theories related to the idea of community abound through the literature, including theories of group cohesion, collective efficacy, group identity, and social capital.

An additional complication is that there is no consistent definition of community. Three nondistinct approaches inform most research related to community: 1) community as geographic space; 2) community as a social network; or 3) community as a type of relationship (Day, 2006). Other research has noted that community may not only be difficult to define, but communities may overlap each other, making it even more difficult for researchers to tease out an individual's sense of community as it relates to one particular community (Brodsky & Marx, 2001). Given the challenges surrounding the idea, researchers have suggested that studying community only through deductive methods further obscures the idea (Dunlap & Johnson, 2010). Thus, the highly contextualized nature of SOC suggests a more nuanced approach.

Harkening to these difficulties, Warner and Dixon (2011, 2013) proposed that

sports settings are particularly unique and, therefore, researchers needed to develop a theory specific to sense of community in a sport setting. Over a series of studies, Warner and colleagues developed the theory of sense of community in sport (SCS; Warner & Dixon; Warner, Dixon, & Chalip, 2012; Warner, Kerwin, & Walker, 2013). In its most current explication, this theory proposes that SOC in sport is comprised of six factors: administrative consideration, equity of administrative decisions, common interest, leadership opportunities, social spaces, and competition. Administrative consideration represents the intentional care and concern of administrators. Similarly, equity of administration decisions is defined as the demonstration that all community members are treated equally. In addition, community members have both informal and formal opportunities for leadership. Common interest notes that a sense of community forms by individuals coming together for a shared interest. Further, bringing together individuals often occurs in social spaces where athletes interact with each other. Competition suggests that both internal and external rivalries enhance community bonding. Finally, it is worth noting that voluntary action was initially considered part of a sense of community in sport, but was dropped in more recent descriptions due to low factor loadings within a study of youth sport participants (Warner, Kerwin, & Walker). Given the potential importance of participation in adult recreational sports, and the potential value of tennis as a context to explore the experience of participation, the purpose of this study was to explore participants' experiences in an adult recreational tennis league and the meaning that those participants ascribe to those experiences.

Methods

Given the nuances of studying particular experiences and contexts, in this study, we chose an interpretive phenomenological analysis (IPA) approach. Broadly, phenomenology is the study of phenomena as they are interpreted by the individual consciousness (Sparks & Smith, 2014). IPA, more specifically, seeks to understand the personal lived experience and one's relation to, or involvement with a particular event or phenomenon (Smith, Flowers, & Larkin, 2009). In this study, we are seeking to understand the experience of participants in recreational league tennis.

We used semistructured interviews to collect data for this study. Semistructured interviews are particularly useful in this case because participants can provide information about their history and the meanings they attach to their experiences (Creswell, 2014; Sparks & Smith, 2014). Because this was our primary interest, semi-structured interviews were the most relevant tool for our data collection as they provide both structure and the flexibility for participants to discuss their own thoughts and feelings (Sparks & Smith).

Data for this study were collected from participants in adult recreational tennis leagues in the greater Salt Lake City region. All participants played United States Tennis Association (USTA) league tennis at the intermediate level of play. Operationally, intermediate was defined by a National Tennis Rating Program (NTRP) rating of 3.5 or 4.0 on a 7.0 scale (usta.com). These ratings are used by USTA leagues to place players in appropriate skill-based divisions. Following IRB approval, participant recruitment began and continued until data saturation was achieved (Guest, Bunce, & Johnson, 2006).

We contacted players through e-mails and phone calls and selected them based on a combination of convenience, snowball, typical case, and deviant case sampling (see

Patton, 1990 for a description of sampling techniques in qualitative research). Initially, we set a criterion of league tennis players who competed at the intermediate level. We selected intermediate level players as representative of the "average player" within the league. I (primary researcher) then reached out to personal contacts within league tennis who met the criterion (convenience sampling) and asked contacts to forward a recruitment e-mail to league players whom they knew and felt would be representative of typical league tennis players (snowball and typical case sampling). Further, I asked the league coordinator of the local district to provide contact information for individuals who she felt were representative of league players (typical case sampling). Finally, I specifically sought out 3 participants who had been identified (in other interviews) as atypical (deviant case) of the league experience. Deviant case sampling is a useful technique to protect against a tendency to select only cases that support the researcher's existing viewpoint and theoretical approach (Sparks & Smith, 2014).

I conducted all interviews in person at a location that was convenient for each participant. Examples included local coffee shops, restaurants, or tennis courts following matches or practices. During informed consent procedures, I verbally notified participants that all responses would be confidential and that they could withdraw at any time without any negative consequences. Interviews were audio recorded and later transcribed verbatim. Following completion of the interview, participants also completed a brief questionnaire of demographic information to provide additional context to the responses.

I conducted interviews with 21 league participants, including 10 female players and 11 male players. Interviews varied in length from 20 minutes to over 1 hour. Participants ranged in age from age 31 to 72 with an average and median age of 47. A

majority of participants identified as married (71%), White/Caucasian (90%), and upper middle-class (52%). Table 4.1 summarizes the demographic information of the participants.

As previously noted, we chose a semistructured interview format to collect data. In order to avoid directing participant responses in a specific direction, the interview guide consisted of "grand tour" questions which sought to allow the participant wide latitude in describing her or his experience (Leech, 2002). This approach is consistent with a phenomenological approach to data collection and analysis that emphasizes the value of an individual experience (Moustakas, 1994). Sample questions included, "Tell me a bit about your experience playing tennis," "Tell me about the relationships with the people you play tennis with," "Tell me what it's like to play on this team," and "What do you get out of playing tennis?" These general questions were then followed up with additional probing questions as needed.

Data Analysis

We transcribed verbatim and analyzed the data by developing qualitative themes as influenced by our interpretation of the data. A hierarchical content analysis, as outlined by Sparkes and Smith (2014,) guided our analyses. Specifically, we conducted data analysis using the following six steps. First, I (the primary researcher) immersed myself in the data (Sparks & Smith). This process involved multiple readings of the transcripts before taking notes or developing codes. During this process, I attempted to maintain an empathetic posture toward the data, a process described as indwelling (Maykut & Morehouse, 1994). That is, I attempted to see the tennis experience through the participants' eyes, rather than through my own experiences. To assist in this process, I

completed a reflective journal shortly after each interview. A reflective journal allowed me to acknowledge my own experiences and perceptions, and how those experiences influenced my interpretation of the participants' responses.

I then searched for, identified, and labeled themes. This process used a combination of theory-based and in-vivo codes (Marshall & Rossman, 2011). I was looking for information specifically related to social benefits, while also maintaining an openness to new codes that could assist in understanding the data. During this phase of analysis, I developed 20 initial codes.

In the next phase of analysis, I connected and ordered the themes. In this step, I sought to connect the raw data themes to categories of greater generality, with each given a title that represented the themes within that category (Sparks & Smith, 2014). For example, initial codes included "unfair line calls" and "administrative unfairness." These codes were collapsed into the more general code of fairness.

Steps four and five addressed the trustworthiness of the data through cross-checking and confirmation. During cross-checking, I returned to the original transcribed data to verify that all themes and categories were represented (Sparks & Smith, 2014). I then engaged three additional researchers who were not present during data collection in a process of confirmation (Sparks & Smith, 2014). The peer researchers reviewed the analysis, including the original transcribed data, and the developed themes, and made comments on the analysis, noting areas of disagreement. We all then met to discuss areas of disagreement until we reached a consensus. During this meeting, we discussed each comment, areas of potential disagreement, as well as potential additional themes. For example, one researcher noted that family involvement appeared in several interviews.

However, upon discussion, we concurred that, while this did frequently occur, it did not appear to be an important part of the experience of the participants but simply the mechanism by which they became involved. In other instances, we disagreed over the placement of particular quotes with one category versus another. In these cases, we agreed that the quote in question was not a prominent example of either theme and did not change the overall salient themes.

Findings and Discussion

We were specifically interested in the meaning that participants ascribed to their experience in recreational tennis. Overwhelmingly, participants discussed the value of the social relationships that they developed through league participation. Notably, some respondents described the value of these relationships with phrases such as "a community," "belonging," and "a second family." These phrasings suggest that the social relationships developed within league tennis were potentially part of a larger feeling of community, thus implying that viewing the data through a sense of community (SOC) lens may be an appropriate approach. The following sections will describe the general theme of the importance of social relationships as well as more specific themes related to social spaces, perceptions of fairness, competition, and voluntary commitment.

Social Relationships

Overwhelmingly, players in our sample discussed the social benefits of league participation when describing their experience. As Barry succinctly described it, "I feel some kind of community-building … it's been really helpful." Similarly, Ellen stated, "there is obviously a sense of belonging, for sure, in a league." Thus, for both Barry and

Ellen as well as many others in our sample, a sense of belonging or community was a prime part of the experience of league tennis.

It is also important to note that this social benefit occurred as a direct result of playing in the league. According to Charlie, "My closest friends are probably from my tennis life … a couple of people from my work, but really my tennis is kinda more of my social friends and I'm very grateful for that." Tiffany described her friends introducing her to league tennis, but then the league providing a completely new set of friendships, "My contacts or my friends are not even related to the very beginning. So, I've made a lot of friends and met a lot of people through tennis." It is clear for a number of participants that the social component was of particular importance to the meaning they ascribed to their experience in league tennis.

A substantial body of research has identified social connections including feelings of belonging and relatedness as fundamental human needs (Deci & Ryan, 2000; 2004). It is, therefore, not surprising that participants in this study identified social benefits as key components of their experience. Further, the desire for social connections may be more pronounced at certain stages of life (Berk, 2013). It is interesting to note that several participants in our study had stopped playing tennis only to later return through participation in league tennis – a boomerang of tennis players. Michael's story exemplifies this pattern of playing tennis,

> So I grew up playing tennis at a young age, ummm, played all the way, played high school tennis, my sophomore and junior year. And then, I don't know, fell out of love my senior year, it's like I got work and other things to do. And then, I just kinda left tennis for a while. I played on and off, played with family, played in college; literally, I stopped for 15
>
> years. And I thought, 3 years ago I thought; "why not start playing tennis again?"

For many participants in our study, their decision to return to playing league tennis appears to correspond with middle adulthood. Considering this and given the importance many participants placed on the social experience, it may be that the need for social connections corresponded to particular lifespan developmental needs. For instance, Berk (2013) noted that individuals in middle adulthood may have a particular need for supportive social contexts, and that positive social relationships are an important part of psychological well-being at this stage of life. Involvement in a community tennis league may be one way of meeting these needs.

We noted multiple themes that intimated similarities with theoretical constructs of SOC in sport. Within our findings, we observed similar themes of social spaces, perceptions of fairness, competition, and voluntary commitment. The following sections will discuss each of these categories.

Social Spaces

Players in our sample discussed social interactions with teammates and other league players that occurred outside of matches. In many cases, this interaction occurred immediately after a match or practice and was facilitated by having a social space to interact. As Chris noted, "Some of the guys will stay after and, you know, socialize, talk, have a drink, soda pop. We bring everything from water to soda pop; cover everybody." Hanging out after the match appeared to be a common way for players to interact. Jerry commented, "So, we always bring beer to the matches, we always drink afterwards, sit around and watch, so it's good, its fun." Interacting in social spaces trumped the competition in importance for some participants. According to Ellen, "Nobody likes to

lose, but at the end of the day, you know, yeah, like usually we'll or go out to dinner after, or get a beer, or … it's not like the end of the world." The social spaces that connect to the league play provided a valuable opportunity for participants to develop relationships that lead to that sense of belonging and community.

The concept of social spaces represents the clearest parallel to the theory of a sense of community in sport. Although our participants did not place particular emphasis on the social spaces, those spaces did correspond to areas where the social connections were developed. Thus, given the a priori reason for the importance of social spaces in sense of community in sports, we included this as a theme. Similar to Warner and Dixon's (2011) findings, these spaces tended to be ancillary spaces to the actual competition. For example, Warner and Dixon discussed training rooms and dining halls as social spaces where athletes developed a sense of community. In our study, league players discussed building social relationships in restaurants, bars, and on the tennis courts following matches and practices.

This finding not only provides additional support for social spaces as part of a theory of SCS, but it also suggests important management implications. Ensuring available social spaces as part of the experience could enhance players' sense of community.

Perception of Unfairness

A number of participants noted the importance of unfairness, or perception of unfairness, in league play. Interestingly, fairness is more often discussed as a negative component of the league experience that detracts from the social experience rather than as a positive element that enhances the social experience; several participants in our study

noted that unfairness was the one thing they did not like about playing league tennis. Further, participants discussed the issue of fairness as both an administrative and individual issue. Administratively, participants discussed unfairness in league rules and structures that created inequities as well as decisions by administrators that allowed those inequities to continue. Individual unfairness can also be further subdivided into two areas. First, individuals demonstrated unfairness by purposefully manipulating the administrative structure to their personal advantage. Second, opponents demonstrated unfairness in matches through unfair line calls or a general lack of sportspersonship behavior.

For some participants, league rules and structures as well as administrative decisions that supported those structures created unfair situations that detracted from the social experience. Allen, a team captain for both a men's team and a mixed team, described how the computer rating system promoted a system where individuals could play at a lower skill level than they should have been, "I think the way of the computer is wrong, because people can game it. And they are." For Allen, this unfairness in the computer rating system reduced the fun of playing in league, "I think it loses its integrity when, I mean, I started to play for fun, but there's definitely teams at all levels that are gaming the shit out of it." In this example, the system of computer ratings created inequity that detracted from the positive experiences of the league.

Administrative decisions could also exacerbate an inequity created by the computer rating system. Katie, a relatively new league player, described a situation where a player was clearly playing at a lower division than her skill level. Other players had complained and a league official went to see the player play. As Katie described the

situation:

> And [league official] watched them play. And [she's] like "oh yea, she's definitely not a 3.5 [skill level]." And then she continues to be playing. Like, you know that she should be bumped to the next level from that doubles league. Bump her! Why didn't you DQ [disqualify] her?

Further, Allen linked this inequity to a diminishing of the social experience. He states:

> I don't know, I think, I think, there just needs to be a more social aspect to it and I just think there's, there needs to be … there needs to be a little more fluidity and people getting bumped up from the team. It's not just the…, you don't allow a computer rating to decide them for the entire year.

In these situations, both the administrative structure (computer rating of skill level) – and the lack of specific administrative action (overruling a computer rating) diminished the positive experience of league participation. In this manner, a perception of a lack of fairness may be an important component of the social experience as a hindrance to developing positive social relationships. Although several participants commented on the inequity in the current administrative structure, a few did note that equity had improved in recent years, and this had improved the experience. Roger, a long-time league player, suggested that a structure that made it easier to move players up and down levels had improved the experience:

> One of the things that I've noticed is that, the way the ratings are done have changed a little bit. I think that's helped. There was a time where you could really stack a team. When I started, I saw a lot of stacked teams … so that was a real downer when you could see sort of a rigged league. I think that the changes the USTA has made have really shaken that up. It's a lot harder to stack a team.

Thus, while fairness generally operated in a negative manner, for some players, fairness actually enhanced the experience.

Participants also experienced a lack of fairness at the individual level. This includes intentional manipulation of the rules to gain an advantage and unfairness during specific matches. Players perceived both individual players and individual teams as intentionally manipulating the rule structure. Misty recalled a situation where a player on her own team manipulated the system:

> But the problem with the [administrative] part of it is that you can kinda work the system. I had a woman I was on the team with last summer. She was on my team, I guess this spring, and she deliberately lost a match so that she wouldn't get moved up. And that's like, really? Like you don't wanna get better?

Here, Misty appears to be expressing frustration with both an administrative structure that allows this to happen and a particular player for intentionally misusing the system.

The issue of players intentionally losing matches in order not to be moved up a level may be an instance where the importance of the social relationships produce a negative action. While the reason for players purposefully avoiding getting moved up a level is not obvious from the data in this study, one plausible reason is that they did not want to be removed from their current team and the social relationships that existed on that team.

A more common complaint was about teams being unfair. This unfairness could take two forms. First, some teams intentionally sought out players who could play at a lower skill rating. This was normally because the player had not played enough matches to receive a computer rating. In one situation, however, players complained about a team bringing in a player from out of state (and another league district). David, a former collegiate player himself, was one participant who described this situation:

> In fact, there was one team a number of years ago that brought a kid in

> from Las Vegas. They would fly him up and have him play, and he was probably at least a 4.5 and maybe even a 5.0 [advanced level player]. And I know the team members on that team were pretty disenchanted because they had to pay for his way up [here], and then of course there was one spot that's left, that this kid, that somebody on the team couldn't play. So that was a problem.

In this case, this manipulation of the system not only negatively impacted social relationships across teams, but as David described the situation, it also negatively influenced the team that was engaging in this action by causing team dissension.

A more common form of perceived unfairness occurred when teams "stacked" a line-up. In league matches, teams designate the order of play with the top player (or top doubles team) playing the top player from the other team, the second best player playing the second best player, and so forth. In this way, matches are intended to be as fair as possible by pitting similarly skilled players against each other. Stacking occurs when teams intentionally play their worst player at the top spot and move other players down the ladder. This creates a situation where the worst player is likely to lose because he or she is playing the best player from the other team. However, the team will likely win the other spots, as the team's best player is now playing the opponents second best player, the second best player playing the third best player, and so forth. Aaron explicitly describes his feelings towards teams that "put [their] number three team at number one and try to stack." He states, "That stuff gets irritating." For Aaron as well as other participants, this method of setting a team's lineup was deliberately unfair.

In addition, participants perceived individual players to be unfair by cheating on line calls, being generally rude, or engaging in other acts of "gamespersonship," or match tactics that attempted to gain a psychological advantage over an opponent. For example, participants considered being rude to be an act of "gamespersonship" as it disturbed an

opponent. This was one of the more common criticisms among individuals in our sample. Abby described this situation, "and the least favorite is when you get somebody who is not nice, who cheats you, or who just, accuses you of cheating or is just not nice to play. It's not fun." Similarly, Katie talked about a player who she stated is notorious in league play for not playing fairly:

> I hate playing [them] … they call the lines where it's just, that was a foot in ... We have one lady in the league that we play and we call her bitchy grandma; like that is the whole league knows her as that.

For both Abby and Katie, playing against players who were unfair during the match diminished the experience and, presumably the social connection; this was a common theme expressed among several participants.

Warner and Dixon (2011) initially proposed equity of administrative decisions as an element of sense of community in sport. This element corresponds to a component of our perception of unfairness theme, as our study did indicate the importance of equity in administrative decisions. However, this description does not address unfairness at the individual level of competition. More recently, researchers proposed that given differences in interaction with administration at different levels of sport, this factor should be changed to equity in decisions with a de-emphasis on administrative equity (Warner, Kerwin, & Walker, 2013). Our findings lend support for this broader definition of equity or fairness.

Competition

We also noted that competition appeared as a salient theme among responses. Participants frequently mentioned competition as one of the reasons they participated in league tennis. For example, when Lori, a 3.5 rated player who played on both women's

and mixed teams, was asked why she played league tennis instead of just playing with friends, she stated, “You're keeping track. You want to see your score; you’re trying to advance your level, challenging yourself to improve your game. And so that feels more legitimate, where, you know, people don't really ask if you won for a social.” Charlie similarly commented, “But matches, they're always competitive and that's part of the reason we're out here is to kind of get that competitive edge out. So, I enjoy it.” The importance of competition was a common reason that participants stated they played league tennis.

For some respondents, the competition also seemed to be linked to the social benefits. For instance, Charlie stated that he played tennis for the socialization and the competition, “it’s probably the camaraderie, and then to scratch the competitive itch, you know?” Michael associated the competitive nature with being part of a team,

> Because it makes you step up, it holds you accountable. You've got to win for your team so you can move on. So it’s just a little bit...winning actually matters. And so it forces you to think about "ok I've got to be serious."

Thus, not only was competition a valuable part of the experience, but it also could be related to being part of a team and the relationships within that team.

Competition could also divide teams. In at least one case, though, this division did not diminish the social relationships that had previously developed. As Madison noted,

> I don’t play on their teams as often as I used to 15 years ago. Because they’re, as they’re getting advanced in age, they are not as competitive as I like to be. I like teams that go to Districts and to Sectionals.

However, Madison made this comment after talking about a weekend trip she had just taken with friends she had developed from previous teams. Thus, for Madison, competition appeared to be a draw of playing in the league, where close relationships

were then developed. Although Madison chose to change teams in order to remain competitive, she was able to maintain the relationships that she had already built.

Furthermore, competition appears to relate to the concept of fairness. More important than just competition, several respondents emphasized the value of fair competition as exemplified by players of relatively equal ability competing against each other. Allen described how unfair line calls could affect the competitive nature of a match.

> You know, I think competition is an interesting thing when there is something on the line, like people, ... you know it creeps out, like, you know, it's just that like some bad. I mean I've seen it on our team. You know, I look at a match and I may make a bad call or two, and they may say, "It's no big deal". As long as I don't feel like the overall impact of the outcome. But when you look at most of your matches, and maybe you do this, I do a lot of, like, look back. And I've decided that most matches are decided between six and sixteen points.

Allen emphasized the importance of fairness in ensuring that matches are competitive in the sense that players of relatively equal abilities have close outcomes. In this way, the theme of competition interacts with the theme of fairness as part of the overall league experience.

Competition may be both a positive and negative force in developing sense of community (Warner & Dixon, 2011). In this study, participants spoke above the value of competition in creating bonds with teammates, but they also spoke of the value of competition for personal growth and accomplishment. For instance, Robin stated, "You are playing to win, like accomplish something." Robin's statement was not tied to the team environment, but to personal accomplishment. Other participants echoed this sense of competition as personal accomplishment and development. Thus, while competition may be a part of developing SOC, it also appears to be the case that for some participants,

the competition may also be important for other reasons.

Voluntary Commitment

Interestingly, a number of participants suggested that while league participation was ultimately voluntary, a certain level of commitment was also important. According to Martha, a female player in her mid-40s who preferred to only play on mixed teams:

> League adds a little bit more commitment to it. Where you kinda have to go. Where if it was just, oh, we're gonna get together on Wednesday night and play, that's harder. And you have to have this committed group. So, I just like league, it gets me out there, and we're not playing against each other, we're playing as a team against other people. That's kinda what I like.

Here Martha is not only noting the importance of commitment, but also relating to the role of commitment in being part of the group or team. Ellen agreed with Martha's sentiment, commenting:

> I don't know. It's good for scheduling; like it's good to… to have a deadline, you know for anything it's good to have a deadline. I think if you sign up for a league, you're committed to league, and, you can't really, you can't back out, you can't flake out, like, you're committed. So I think that's good, and like with how busy all of our lives are right now.

For both Martha and Ellen, commitment to the team and the league are important parts of the experience.

In contrast, a lack of commitment could be very frustrating for league players. Cameron, who had recently relocated from another region, expressed his frustration when players did not commit, "Another thing that is weird here … you get a lot of defaults. Teams can sign-up and then don't show up." Cameron also described how the people he played league tennis with in his previous location had become his "second family," but he had not yet found those relationships in his new home. Part of his inability to develop

new relationships appears to be rooted in his frustration that players in his new league were not adequately committed.

Further, when the voluntary time commitment was not accompanied by administrative fairness, the commitment risked leading to a negative experience. In at least one case, administrative fairness was equated with a reasonable schedule of matches that did not overwhelm players' schedules. According to Allen:

> Like there is no time, like, the way they have done it, it's like overlapping. There is no, like, we have people on our team saying ,"Hey, Allen, I think what would be better for us is like…I love doing that work out once a week with [coach] but I would love to play a match with people on our team. And as a captain you say, "I would love that too but guess what? No one, that's three days of tennis that you just asked for. No one can do it. No one will do it." There is just, especially when you have mixed overlapping with men's and overlapping with women's, and suddenly I'm looking at [the league administrator] and going why did we have to get this done now? I think there is an organizational thing that could be better.

For Allen, the overscheduling of league play actually forced him to neglect other social commitments, "Like, I had to turn down every party I was invited to. Like, I can't be there at all … just think there needs to be that social aspect coming back. I mean, I'm so burned out on leagues." Although commitment was important, requiring players to commit too much actually created a negative experience. Not only did this negative experience reduce opportunities for social interactions outside of league play, but it also risked alienating a participant from the league and the social relationships with league. In this manner, voluntary commitment interacted with administrative fairness to influence the experience of the participant.

Being committed was an important part of the rationale of league play for many participants, and detracted from social relationships when commitment was lacking. Two factors within the theory of a sense of community in sport (SCS) are worthy of discussion

here. First, much of the theory development work has included voluntary action as a factor of sense of community in sport (Warner and Dixon; 2011; Warner, Dixon, & Chalip, 2012). Interestingly, however, this factor was dropped due to a lack of predictive validity in recent scale development work (Warner, Kerwin, & Walker, 2013). Our work agrees with omitting voluntary action as a factor in sense of community, but suggests that voluntary commitment may still be a relevant factor. Further, this factor may be a combination of voluntary commitment and leadership opportunities. For our purposes, we define voluntary commitment as a commitment to the community that is voluntary in nature. Thus, it is not simply voluntary action - which may not include commitment- nor, is it commitment - which may not be voluntary.

Given the overlap with Warner's SCS theory, it is also worth discussing areas within Warner's framework that we did not perceive in our findings - leadership opportunities and common interest. Leadership opportunities did not appear to be a salient theme for participants in our study. Although a few participants did mention that they appreciated when team captains consulted them for their opinion, others suggested a purposeful avoidance of leadership opportunities citing the tremendous amount of work involved in leading a team. On the surface, therefore, this study would suggest that leadership opportunities was not a relevant factor of sense of community. However, a closer examination of the definition of the theory SCS reveals that leadership opportunities includes accountability, responsibility, and ownership (Warner & Dixon, 2011). Thus, our discussion of voluntary commitment appears to be conceptually related to the construct of leadership opportunities. Considering the previously problematic findings related to voluntary action as a component of sense of community in sport, and

our findings related to commitment and leadership opportunities, we suggest the constructs of leadership opportunities and voluntary action may be collapsed in to a component of voluntary commitment.

Finally, it should be noted that common interest did not appear as a salient theme in our research. Common interest is included within the theory of SCS as a factor leading to a sense of community. However, none of the participants in our study mentioned having a common interest with others as important to their experience. It may be that common interest is simply assumed as everyone in the tennis league has an implied interest in playing tennis. Participants join communities based on a common interest; common interest may, therefore, be a redundant nature of sense of community. One does not say that living in the same area is a factor of a geographic sense of community. What may be more important to the overall development of community is the importance that one places on that common interest. That is, how important is that interest to the group member's overall life and identity? Additional research has identified social identity as an important element in the development of sense of community in other settings (Obst & White, 2005). Thus, our research suggests the removal of common interest as a factor in this theory and further exploration related to social identity.

Implications and Conclusions

This study contributes to both theory and practice in important ways. Theoretically, this study adds valuable information to recent conversations within the literature related to a sport specific theory of sense of community. Our study supports some of the elements of the recently developed theory of sense of community in sport, while also suggesting slight variations. We found support for the components of social

spaces and competition, while lending partial support for an equity in decisions component, although a broader element of simply equity (or fairness) may be more generally applicable to multiple sports settings. In addition, we suggest that the components of voluntary action and leadership opportunities be collapsed into the component of voluntary commitment. Further, we noted that the various elements clearly intermingle with each other rather than operating in isolation. Finally, we suggest that common interest should be eliminated as it does not add additional understanding to the theory and that concepts of social identity should be further explored.

From a management perspective, a more thorough understanding of participants' experiences and the components of sense of community in sport leads to numerous practical implications. For example, recognizing that social spaces contribute to an overall sense of community provides potential strategies for sport managers. Sport managers are likely to be focused on the "in-game" experience – scheduling, officials, field conditions, and so forth. While these are certainly essential components of the experience, sport managers should not neglect ancillary areas as places where key positive outcomes are likely to develop. This may be as simple as attempting to schedule games/matches near social spaces such as restaurants and bars to give participants an easy place to engage with each other outside of the competition. The popularity of adult social sport leagues (e.g., Arlington Athletic and Social League (www.playaasl.com), Beehive Sport and Social Club (www.beehivesports.com), New York Social Sports Club (www.nysocial.com), and Social Sports of Arlington (www.socialsportsofarlington.com)) seem to speak to this need. These leagues not only provide competition, but also collaborate with local restaurants and bars to provide participants with social spaces

outside of competition. However, even if such a system were not possible, managers can still program space in such a way that there is physical space for players to interact following competition. In addition, this study emphasizes the importance of fairness or equity at the administrative level. This suggests that managers should be extra diligent and transparent about decisions that affect the perceived fairness of league play. For example, the resolution of grievance complaints related to issues of fairness could be made public, rather than only communicated with the specific stakeholders.

Recreational sports continue to be popular activity choices for adults. Thus, it is imperative that we seek to better understand the experience and the meaning that participants ascribe to their experience. Further, given the potential value of recreational sports as a setting in which to develop SOC, this construct is particularly worth exploring. This study contributes to our understanding of sense of community in sport and suggests additional areas of exploration. By understanding components of sports that lead to SOC, managers have valuable information to assist in designing programs that seek to create this positive benefit. In order to further enhance our understanding of SOC in this setting, future research should continue to examine SOC, including the relation of SOC to additional outcomes including psychological, physical, and social measures.

Table 4.1. Participant Information

Participant Alias	Age Range	Gender	Skill (NTPR) Rating *
Susan	35-44	Female	4.0
Allen	45-54	Male	4.0
Aaron	45-54	Male	4.0
Misty	35-44	Female	3.5
Roger	55-64	Male	4.0
Barry	45-54	Male	4.0
Martha	35-44	Female	3.5
Lori	35-44	Female	3.5
Ellen	35-44	Female	3.5
Jerry	45-56	Male	3.5
David	65-74	Male	4.0
Charlie	45-54	Male	4.0
Abby	55-64	Female	4.0
Katie	25-34	Female	3.5
Michael	35-44	Male	3.5
Tiffany	35-44	Female	4.0
Cameron	45-54	Male	3.5
Daniel	55-64	Male	4.0
Chris	65-74	Male	4.0
Robin	35-44	Female	3.5
Madison	45-54	Female	4.0

* A rating of 1.0 represents a complete beginner, while a 7.0 indicates a professional tennis player. Intermediate players are considered 3.5 or 4.0 players.

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CHAPTER 5

SENSE OF COMMUNITY AND SOCIAL CAPITAL: EXAMINING THE MODERATING EFFECTS OF SOCIAL IDENTITY, PSYCHOLOGICAL INVOLVEMENT, AND BEHAVIORAL INVOLVEMENT IN ADULT RECREATIONAL LEAGUE TENNIS

Introduction

The development of social capital may be an important outcome of participation in recreational sports due to its association with numerous other positive outcomes, including increased economic prosperity, happiness, and general health (Putnam, 2000). Broadly, social capital represents the value of relationships among persons (Coleman, 1988; 1990); it is "the connections among individuals – social networks and norms of reciprocity and trustworthiness that arise from them" (Putnam, 2000, p. 19). Of particular interest is the relation of social capital to health. Participation in recreational sports impacts overall health in a number of ways, most obviously through increased physical activity. An increasing body of research points towards social capital as an important factor related to health outcomes (Averett, Argys, & Kohn, 2014; Folland, 2013; Kawachi & Berkman, 2013). Although the specific connection of social capital to health is beyond the scope of this research, this connection is worth noting given increased concerns related to health and the potential ability of participation in recreational sports to address those disparities (Meyer, Yoon, Kaufman, Office for State, Tribal, Local and

Territorial Support, CDC, & Center for Surveillance, Epidemiology, and Laboratory Services, CDC, 2013; Putnam, 2000).

Indeed, the extant research presents several examples of sport creating social capital by bringing participants together (e.g., Vermeulen & Verweel, 2009; Walseth, 2008). Less clear, however, is what psychological and behavioral factors within the recreational sport experience relate to the development of social capital. Further, how do those factors interact with each other? A better understanding of these specific factors may help sport managers design programs that enhance the development of social capital.

Social capital is a multifaceted construct consisting of trusts, norms, networks, and obligations (Putnam, 2000; Woolcock, 1998). Within a recreational sport context, a considerable body of research has focused specifically on the networks of social capital, as distinguished through bridging and bonding social capital networks (Clopton & Finch, 2010; Vermeulen & Verwell, 2009; Walseth, 2008). Although this research suggests that sport participation may lead to both bridging and bonding social capital, little is understood about how each form of a social capital is developed (Clopton & Finch, 2010). Given that each form of a social capital network is associated with different outcomes (Putnam, 2000), this represents a key gap in understanding the development of social capital in recreational sport settings.

It is also clear that participation in adult recreational sports is an increasingly popular social-context (Ham, Kruger, & Tudor-Locke, 2009). Thus, sport managers have a unique opportunity to influence a number of individuals in this setting. As noted, however, a gap exists in our understanding of factors that lead to social capital within this context, and more specifically to the factors that lead to the different aspects of bridging

and bonding social capital. Existing research within recreation and sports settings suggests that the constructs of sense of community (SOC), social identity, psychological involvement, and behavioral involvement may help explain outcomes within this setting. The following sections will, first, provide an overview of social capital, including the subsets of bridging and bonding social; then discuss potential relations among the predictor variables outlined above.

Social Capital

As previously noted, social capital consists of a number of constructs. Of specific interest to this research are the constructs of bridging and bonding social capital. Bonding social capital is internally focused; it is the type of capital that connects a particular group sharing a set of experiences, background, or other similarities, and is particularly valuable in reinforcing norms of reciprocity (Putnam, 2000). For example, individuals who experience bonding social capital may be more likely to return a favor, such as paying court fees for another person for a league match. Bonding social capital may also be useful in exerting positive peer influences related to health behaviors (Folland, 2008).

In contrast, bridging capital links individuals across networks or groups that may represent different races, ethnic groups, social statuses, religions, regions, etc. Bridging social capital is important for linking to external assets (Putnam, 2000). For example, bridging social capital may be useful for helping find a job or providing a recommendation for a doctor.

Bridging and bonding social capital are specifically relevant to this research for two reasons. First, participation in recreational sports may generate both bridging and bonding social capital as participants have opportunities to connect both with individuals

of similar backgrounds and with individuals from different networks and groups (Clopton & Finch, 2010; Walseth, 2008). Within a recreational tennis setting, teams from different neighborhoods, parks, and clubs compete against each other. Further, as a result of this interaction, players will often connect with each other and then play on an additional team with players that met through competition. These interactions present the opportunity for individuals to connect outside of their normal social groups. Second, it is worth noting that bridging and bonding social capital may influence health outcomes differently. For instance, bridging social capital is more likely to lead to access to outside resources by connecting individuals to networks that they previously did not access, while bonding social capital may be more influential in positive peer pressure to reduce bad health habits as social norms are more strongly influenced within bonding networks (Folland, 2008).

Although both bridging and bonding social capital may develop through participation in recreational sport programs (e.g., Vermeulen & Verweel, 2009; Walseth, 2008), it is also clear that sport programs do not automatically create positive benefits. Rather, programs must be actively managed in order to create a scenario that is most likely to enhance the desired outcomes (Chalip, 2006). Thus, it is imperative to investigate specific elements that relate to the development of social capital in recreational sport settings. Bandura's (1986) social-cognitive approach presents a valuable lens through which to examine developments in a social setting. Social-cognitive theory proposes that outcomes emerge from the interplay of personal elements, environmental influences, and behaviors. While there are near limitless possible constructs to explore within this broad framework, this study focuses on one potential

predictor and three potential moderators that have previously been used to help explain variance in outcomes in recreational sport settings. Specifically, prior research supports the feeling of a sense of community (SOC), social identity, psychological involvement, and behavioral involvement as potentially valuable predictors and moderators of positive outcomes in recreational sport settings (e.g., Legg, Wells, & Barile, 2015; Obst & White, 2005; Obst, Zinkiewicz, & Smith, 2002a; Sato, Jordan, & Funk, 2014). Each of these constructs will be discussed below.

Sense of Community

From an individual psychological viewpoint, a participant's feeling of a psychological sense of community (SOC) may relate to his or her development of social capital. McMillan and Chavis (1986) define SOC as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986, p. 9). SOC develops based on the interaction of the components of membership, integration and fulfillment of needs, influence, and shared emotional experience (McMillan, 2011; McMillan & Chavis;). Similar to social capital, SOC focuses on the experience and value of social relationships within a given context. SOC and social capital, however, are conceptually different in that SOC focuses on a particular feeling, while social capital focuses on the structure of social relationships. Although these constructs are conceptually different, a clear correction exists between the two constructs that supports empirical testing (Clopton & Finch, 2010; Colclough & Sitaraman, 2005).

Although SOC may be useful in explaining the development of social capital, it is

also apparent that community is a contextual, sometimes overlapping, concept (Dionigi & Lyons, 2010). Recent work related to SOC in a sport context supports the contextual nature of SOC within sport, and has led to the development of a sport-specific Theory of Sense of Community in Sport (SCS; Warner & Dixon, 2011). This approach suggests that SOC develops in unique ways in a sports setting and thus requires its own theoretical explication specific to this context. A series of both quantitative and qualitative studies led to the explanation of this theory with the following six elements contributing to SCS: (a) administrative consideration, (b) common interest, (c) equity in administrative decisions, (d) leadership opportunities, (e) social spaces, and (f) competition (Warner, Kerwin, & Walker, 2013). In addition, SCS may be useful as it offers not just a theoretical explanation, but also potential practical implications. For example, sport managers have the opportunity to enhance social spaces as part of the sport participation experience.

A body of literature supports the value of SOC as a predictor of numerous positive outcomes. Of particular interest to this study is previous research suggesting SOC as a positive predictor of such outcomes as increased involvement in healthy activities (Peterson & Reid, 2003), increased emotional connections (Goodwin, et al., 2009), and increased civic participation (Chavis & Wandersman, 1990). These outcomes suggest that a participant who experiences SOC may be more likely to participate more and develop the connections necessary to developing social capital. As such, it is logical to suggest that SOC within this context may be a relevant predictor of overall social capital.

Social Identity

Although SOC may be a valuable predictor of positive outcomes, (e.g., increased self-confidence, emotional connections, coping skills, and civic participation; Chavis & Wandersman, 1990; Goodwin, et al., 2009; Greenfield & Marks, 2010), the value of SOC as a predictor may be moderated by the strength of other variables. For instance, several, researchers have noted the importance of social identity with the specific community as relevant to the impact of SOC (Clopton & Finch, 2010). That is, the amount that SOC relates to a positive outcome may depend on the degree to which a person identifies with that particular community (Obst & White, 2005; Obst, Zinkiewicz, & Smith, 2002a; Obst, Zinkiewicz, & Smith, 2002b). An individual may feel a strong sense of community within a sport context, but if that community is not important to the individual's social identity, then the impact of that sense of community may be mitigated.

Social identity is "that part of an individual's self-concept which derives from his [or her] knowledge of his [or her] membership of a social group (or groups) together with the value and emotional significance attached to that membership'' (Tajfel, 1978, p. 63). Thus, social identity is inextricably related to the group or community membership. Further, social identity is divided into three factors - centrality, in-group affect, and in-group ties (Cameron, 2004). Centrality represents the frequency with which the group (or community) comes to mind and the subjective importance of the group to the individual; in-group affect refers to specific emotions that occur as a result of membership within the group or community, and in-group ties represents the extent to which individuals feel part of a particular group or community (Cameron). Although social identity shares similarities with a sense of community, previous research indicates that while social

identity helps explain the role of SOC, it is not subsumed within existing definitions of SOC (Obst, Smith, & Zinkiewicz, 2002). Therefore, when looking at the impact of SOC, it is also crucial to examine the importance of the community to the individual as operationalized through his or her social identity relative to the specific community.

Psychological Involvement

While a body of research supports moderation between SOC and social identity, two additional constructs warrant exploration in order to provide a fuller picture of possible elements within the recreational sport experience that may predict social capital. Specifically, consistent with a social-cognitive approach that recognizes the value of both personal cognitive and behavioral elements (Bandura, 1986), psychological involvement and behavioral involvement help characterize an individual's participation experience and may, therefore, provide additional explanation as to the impact of that experience. Psychological involvement may be defined as the degree to which an individual's participation in an activity becomes a central component of his or her life (Beaton, Funk, Ridinger, & Jordan, 2011). Given, the interest in this study in the relation of an experience within a sport context to a broader overall outcome (social capital), it is logical to propose that the greater the psychological involvement in the activity, the greater the impact will be on additional outcomes. Further, the extant research supports psychological involvement within recreational sport contexts as a valuable predictor of additional outcomes. For example, Sato, Jordan, and Funk (2014) note that psychological involvement in a recreational sports activity is positively related to life satisfaction, while Chang and Gibson (2011) found a strong relation between psychological involvement and participation in paddling activities.

Psychological involvement is similar to social identity in its focus on salience; however, it focuses on the salience of an activity itself while social identity focuses on the salience of group membership. Further, while a wide of body of literature exists connecting psychological involvement with outcomes in recreational activities, limited research exists exploring the relationship of psychological involvement with SOC or social capital. This void is in spite of the logical connection between psychological involvement and the development of social connections (Brehm & Rahn, 1997). This research addresses the gap by including psychological involvement as a potential moderator of the relation between SOC and social capital.

Behavioral Involvement

While social identity and psychological involvement focus on the personal cognitive elements with a social-cognitive framework, behavioral involvement emphasizes the action (behavioral) component. Logic suggests that behavioral involvement in a particular activity or community will also influence the development of social capital. In other words, the more a person is involved within a particular community, the more likely he or she will develop the networks indicative of social capital. Behavioral involvement is also theoretically consistent with an investment in the membership of the group (; McMillan, 2011; McMillan & Chavis, 1986). However, research has failed to demonstrate a link between behavioral involvement and social psychological outcomes in recreational sport settings. For example, in a study of runners, behavioral involvement did not emerge as a significant predicator of quality of life outcomes (Sato, Jordan, & Funk, 2014). Thus, it may be that behavioral involvement helps explain feelings related to the particular group, but may fail to explain larger

outcomes such as social capital. Alternatively, it may be that behavioral involvement does not directly relate to an outcome, but may moderate the relationship of other variables. Given the ambiguity related to behavioral involvement and its influence on other outcomes it is, therefore, important to continue to examine if this construct relates to additional social and psychological outcomes.

The Present Study

Given the value of social capital, and the potential of SOC within a recreational sport setting to help predict social capital, the purpose of the present study was to examine if SOC within a recreational sports league related to both bridging and bonding social capital after controlling for demographic variables (sex, skill, income level, or number of children). Further, this study also addressed the potential moderation of the relation of SOC to social capital by examining moderation between SOC and social identity, SOC and psychological involvement, and SOC and behavioral involvement on social capital. Prior research supports these additional constructs as potentially valuable predictors of outcomes within recreational sport contexts as well as potential significant moderators with SOC (e.g., Legg, Wells, & Barile, 2015; Obst & White, 2005; Sato, Jordan, & Funk, 2014). Further, the inclusion of these additional variables is consistent with a social-cognitive approach that recognizes the value of personal cognitive and behavioral variables. Finally, given previous research suggesting that sport may create both bridging and bonding social capital (Vermeulen & Verweel, 2009; Walseth, 2008) and suggestions that the relations to these different networks is underexplored (Clopton & Finch, 2010), this study also examined links between the predictor variables and the subscales of bridging and bonding social capital. Thus, the following two propositions

with corresponding hypotheses were tested:

Proposition 1: SOC will be a significant predictor of bonding social capital and will be further moderated by social identity, psychological involvement, and two measures of behavioral involvement.

H1: Individuals who report higher levels of SOC will also report higher levels of bonding social capital.

H2: The relation between SOC and bonding social capital will be moderated by social identity, such that the strength of the relation between SOC and bonding social capital will depend on the level of social identity.

H3: The relation between SOC and bonding social capital will be moderated by psychological involvement, such that the strength of the relation between SOC and bonding social capital will depend on the level of psychological involvement.

H4: The relation between SOC and bonding social capital will be moderated by the average number of hours spent participating in league tennis (behavioral involvement), such that the strength of the relation between SOC and bonding social capital will depend on average number of hours spent participating in league tennis.

H5: The relation between SOC and bonding social capital will be moderated by the number of years participating in league tennis (behavioral involvement) such that the strength of the relation between SOC and bonding social capital will depend on how many years an individual has participated in league tennis.

Proposition 2: SOC will be a significant predictor of bridging social capital and will be further moderated by social identity, psychological involvement, and two measures of behavioral involvement.

H6: Individuals who report higher levels of SOC will also report higher levels of bridging social capital.

H7: The relation between SOC and bridging social capital will be moderated by social identity, such that the strength of the relation between SOC and bridging social capital will depend on the level of social identity.

H8: The relation between SOC and bridging social capital will be moderated by psychological involvement, such that the strength of the relation between SOC and bridging social capital will depend on the level of psychological involvement.

H9: The relation between SOC and bridging social capital will be moderated by the average number of hours spent participating in league tennis (behavioral involvement), such that the strength of the relation between SOC and bridging social capital will depend on average number of hours spent participating in league tennis.

H10: The relation between SOC and bridging social capital will be moderated by the number of years participating in league tennis (behavioral involvement) such that the strength of the relation between SOC and bridging social capital will depend on how many years an individual has participated in league tennis.

Method

Participants and Procedure

This study employed a cross-sectional design where data were gathered using an online questionnaire. Participants in this study were members of Intermountain Tennis Association (ITA) adult tennis leagues, and were recruited to participate via an e-mail invitation.

Prior to the start of the study, researchers contacted the league administrators to

obtain their agreement and willingness to participate in the research project. Following IRB approval, potential research participants received an electronic invitation to complete an online questionnaire. The questionnaire was sent directly from ITA league administrators, and individuals who completed the questionnaire were entered in to a drawing to win a gift card of nominal value.

Participant recruitment yielded 354 responses. Five responses were not included in the analysis due to having greater than 20% missing data (Peng, et al., 2006), and one response was deleted for not meeting the criteria of currently participating in an adult recreational tennis league. Of the remaining 358 responses, 167 had complete data on all variables. Missing data on one or more items on the social capital scale corresponded to the greatest amount of missing data (*n*=56), followed by individuals who had missing data on income (*n*=32), and data missing on the question related to age (*n*=23). Little's MCAR test indicated data were missing completely at random (X^2= 3027.928, p = .900). For Little MCAR's test, a nonsignificant result indicates that there is not a significant difference between cases with missing data and cases without missing data. Expectation maximization was used for all missing data on continuous variables (Schafer, 1997).

Demographic characteristics of the sample revealed that participants' ages ranged from 21 to 82 with a mean and median age of 54. The two most common household income groupings were between $75,001 and $100,000 (18%) and between $100,001 and $125,000 (18%). Sixty-one percent of respondents identified as female whereas 39% identified as male. Most players played at intermediate skill levels (64%). The number of children under 18 and living at home ranged from zero to four, with a majority of participants reporting no children under 18 currently living at home.

Measures

A comprehensive questionnaire using measures from previous research was designed to meet the specific objectives of this study. Each of these measures is discussed in the following sections.

Sense of community. Sense of community was measured using the Sense of Community in Sport Scale (SCS; Warner, Kerwin, & Walker, 2013). The SCS was previously developed to assess elements of SOC that are particular to a sport setting. Further, in accordance with recommendations by Warner and colleagues and consistent with prior research, items pertaining to equity in administrative decisions were reworded to eliminate the emphasis on administration and instead focus on general perceived equity within the league. The SCS was used to assess the overall strength of SOC among a community of players in adult recreational tennis leagues. This scale uses 21 items on a 5- point Likert-type scale to measure participants' feelings on how well the statements represent a specific sport community (e.g., their tennis league). Examples of statements include "I share similar values with other players in my tennis league," "My tennis league provides me with a place to interact with other players," and "I like the level of competition in my tennis league." Responses ranged from 1 (Not at All) to 5 (Completely). Previous research found this scale to demonstrate strong psychometric properties (Warner, Kerwin, & Walker). Based on these 21 items, a mean summary score was created from each participant (range, 1.60-5.00; M = 3.81; SD = .57). The summary score was found to be normally distributed (skewness = -.712; kurtosis = 1.25) and had acceptable levels of internal consistency (α = .86).

Social identity**.** Social identity was evaluated by the Three-Dimensional Strength

of Group Identification Scale (TDSIS; Cameron, 2004). This 12-item scale examines three distinct elements of identification: centrality, in-group affect, and in-group ties. The summary score was calculated by taking an average of Likert type responses (1-5, strongly disagree to strongly agree) to 12 statements regarding participants' level of identification with the community (e.g., "I have a lot in common with other members of league"). The summary score was found to be normally distributed (range, 1.5-4.5; *M* = 3.26; *SD* = .55; skewness =-.407; kurtosis = .122) and similar to previous studies (Cameron, 2004; Obst & White, 2005), this scale was found to have acceptable internal consistency (α =.81).

Psychological involvement**.** Based on prior research in sport settings (Beaton, et al., 2011; Sato, Jordan, & Funk, 2014), psychological involvement was assessed using three-items of pleasure, centrality, and sign. On a 5-point Likert-like scale, participants were asked to indicate their level of agreement on the following statements: (a) I really enjoy tennis; (b) I find a lot of my time is organized around playing tennis; and (c) Tennis says a lot about who I am. The summary score was found to be normally distributed (range, 1.0-5.0; *M*=4.16; skewness =-1.05; kurtosis = 2.295). In addition, the scale demonstrated acceptable levels of internal constituency (α =.87).

Behavioral involvement. The study also sought to determine the relation of behavioral involvement to social capital. Consistent with Sato, Jordan, and Funk (2014), behavioral involvement was operationalized through two measures: (a) the average number of hours spent participating in tennis league activities each week (matches or practice), and (b) the number of years of participation in league tennis.

Social capital. Given (a) the interest of this study in the relation of health outcomes to recreational sport participation; (b) research suggesting that bridging and bonding social capital were key components of participation in recreational sports participation; (c) research suggesting that the development of social capital networks could lead to overall improved health (Folland, 2013; Kawachi & Berkman, 2013); and (d) ongoing debates about the measurement of social capital, a scale was used to address these issues. The Personal Social Capital Scale-16 (PSCS-16; Wang, Chen, Gong, & Jacques-Tiura, 2014) attends to these concerns. The PCSC-16 is a frequently used scale in health research and is specifically interested in social capital networks, including bridging and bonding subscales. Consistent with previous research (Wang, Chen, Gong, & Jacques-Tiura, 2014) this scale demonstrated high levels of internal consistency for the overall scale (α=.86), as well as for the subscales of bonding social capital (α=.76), and bridging social capital (α=.85).

Covariates. To account for the possible effects of demographic characteristics, it is important to adjust for individual differences that may influence individuals' responses but may not be directly relevant to the research questions at hand. For this reason, this study included five demographic variables (a) age, (b) sex, (c) income, (d) number of children, and (e) tennis skill level rating. Age was included as individuals may have developmental needs for social connections depending on their life stage (Berk, 2013) and was calculated by asking participants to indicate their year of birth. In addition, previous research suggests that sex, income, and number of children may influence reports of SOC (Lambert and Hopkins, 1995; Warner, 2012; Wilkinson, 2008). Tennis skill rating was included as a covariate because participants with higher skill level may be more interested in the competition and thus potentially less interested in developing the

social relationships that could lead to SOC and social capital.

Data Analysis

Based on the literature, it was hypothesized that the level of both bridging and bonding social capital would be related to the interaction between SOC and social identity, psychological involvement, and two measures of behavioral involvement. Further, given that a body of literature already supports a number of demographic factors as predictors of social capital, this research was specifically interested in the hypothesized relationships after controlling for demographic predictors. That is, the level of bridging and bonding social capital would depend upon the interaction between SOC and the four additional variables (social identity, psychological involvement, two measure of behavioral involvement). Thus, a regression analysis was conducted utilizing PROCESS (Hayes, 2012). This technique provides several advantages over traditional methods of regression, including automatically centering predictors, computing interaction terms, and conducting a simple slopes analysis (Field, 2013). Perhaps, most importantly, this technique allows the researcher to probe the interaction to determine the zone of significance, or the range where the moderation is significant (Hayes, 2012).

Results

In order to determine if the variables were discrete, bivariate correlations and tolerance levels were inspected (see Table 1). Although several variables were significantly correlated, tolerance levels ranged from .44 to .93. In general, tolerance values of .10 or less indicate problems of multicollinearity (Cohen, Cohen, West, & Aiken, 2003). Thus, the tolerance scores support the idea that the predictor variables

could be treated as discrete and should not pose problems of multicolinearity. Standardized means for the variables of interest are displayed in Table 2.

In addition, assumptions of normality and independence were tested. Reviews of historgram data plots and normal p-p plots indicated that the data were normally distrubuted. Independence was tested using the Durbin-Watson test. The Durbin-Watson measurement for the two models was 2.00 for the regression on bonding social capital and 2.24 for the regression on bridging social capital. As a rule of thumb, values near two indicate that the data are likely independent (Field, 2013). Thus, the data appear to meet assumptions of regression.

In order to examine the impact of each potential moderator while controlling for covariates, an iterative process was followed where SOC was entered as the predictor variable, one moderator variable was entered (e.g., social identity, psychological involvement, number of hours spent participating in league tennis, or number of years spent playing league tennis; Hayes, 2012), and the five demographic variables were entered as covariates. Thus, four models were created based on the regression on bonding social capital and an additional four models were created based on the regression on bridging social capital.

Since the number of children was not normally distributed, this variable was transformed into a dichomotous predictor (no children versus children) and dummy coded. Inspections of histogram plots indicated that responses across 11 income categories and six skill level categories were normally distributed and, therefore, these variables were treated as ratio variables. For purposes of reporting, results of the regression models on bonding social capital will be reported first, followed by results of

the regression models on bridging social capital.

Bonding Social Capital

Model 1 included SOC as the predictor variable and social identity as the moderator variable and accounted for a significant amount of variance in bonding social capital (p=.001, R^2 =.079). A significant association between income and bonding social capital was supported (b=.03, p=.01); however, significant associations based on the remaining variables was not supported. Further, the model did not support a significant moderation between SOC and social identity on bonding social capital.

In model 2, pscyhological involvement was included as the moderator variable. This model also explained a significant amount of variance (p<.001, R^2 =.089). A significant association between income and bonding social capital was supported (b=.0355, p=.011), and a significant moderation between SOC and psychological involvement on bonding social capital was also supported (b=.21, p=.01).

Probing of the moderation revealed that the moderation is significant at average and high levels of psychological involvement. That is, when an individual's psychological involvement is near or above the mean score for psychological involvement, there is a significant positve relation between SOC and bonding social capital. In other words, when individuals have average or higher psychological involvement, bonding social capital increases as SOC increases. Figure 1 graphically displays this moderation.

Model 3 included the measure of behavioral involvement as the moderator variable (average number of weekly hours spent participating in league tennis). The overall model accounted for a significant amount of variance in bonding social capital

($p<.01$, R^2 =.084). In this model, income (b=.036, p=.01) and SOC (b=.17, p=.02) emmerged as significant predictors of bonding social capital. However, a significant interaction between SOC and average number of hours on bonding social capital was not supported. Thus, when the average number of hours spent participating in league tennis is included as a potential moderator varaible, there is a positive relationship between SOC and bonding social capital regardless of the number of hours of involvement.

The number of years spent participating in league tennis was added as the moderator variable in model 4. Similar to model 3, model 4 explained a significant amount of variance in bonding social capital (p=.003, R^2 = .0872). Significant associations between income and bonding social capital (b=.004, p = .01) and between SOC and bonding social capital (b=.17, p .03) were supported. A significant interaction between SOC and the number of years spent participating in league tennis was not supported. In other words, in this model, bonding social capital increases as SOC increases regardless of the number of years partcipating in league tennis. Results of all four models are displayed in Table 3.

In sum, hypothesis one was partially supported as main effects between SOC and bonding social capital were suppported when including measures of behavioral involvement as potential moderators. In additon, hypothesis three was supported as pyschological involvement moderated the relation between SOC and bonding social capital. Hypotheses four and five were not supported as significant interactions between either measure of behavioral involvement and SOC on bonding social capital did not emmerge.

Bridging Social Capital

In order to test hypotheses related to the second proposition, an identical iterative process was followed, replacing the criterion variable of bonding social capital with bridging social capital. In this case, four models were created with each model including SOC as the predictor variable and one of the potential moderator variables as a moderator (e.g., social identity, pyschological involvement, average number of weekly hours, and number of years spent playing league tennis). Significant interactions across all four models were not supported. However, model 3 (which included average number of weekly hours as a potential moderator) supported a main effect between SOC and bonding social capial (b=.16, p =.047). In addition, model 4 (which included the number of years spent participating in league tennis) also supported a main effect between SOC and bonding social capital (b=.16; p=.046) Thus, hypothesis six was partially supported, while hypotheses 7-10 were not supported. Table 4 displays the results of all four models.

Discussion

One way social capital may develop is related to a feeling of SOC. That is, do individuals who experience a *feeling* of community within a recreational sport setting also develop higher levels of social capital? Further, do the variables of social identity, psychological involvement, and behavioral involvement moderate the relation between SOC and social capital (bridging or bonding)? The results of this research provide support for a feeling of SOC within a recreational tennis league as significantly relating to bonding and bridging social capital regardless of behavioral involvement. Further, the relation of SOC to bonding social capital is significantly moderated by psychological

involvement. Each of these key findings is discussed below.

Proposition one concerned the relation of SOC to bonding social capital as both a main effect and as moderated by psychological involvement, social identity, and two measurements of behavioral involvement. This proposition was partially supported as results support significant main effects between SOC and bonding social capital regardless of levels of behavioral involvement (hypothesis 1; models 3 and 4), and a significant interaction between SOC and psychological involvement on bonding social capital (hypothesis 3; model 2). A significant main effect between SOC and bonding social capital was not supported when social identity or psychological involvement were included as potential moderator variables (hypothesis 1; models 1 and 2). Significant moderation effects between SOC and social identity (hypothesis 2; model 1), SOC and average number of weekly hours participating in league tennis (hypothesis 4; model 3), and SOC and number of years participating in league tennis (hypothesis 5; model 4) were not supported.

As noted, SOC emerged as a significant predictor of both bridging and bonding social capital regardless of levels of behavioral involvement. In other words, as an individual's SOC increases, bonding and bridging social capital also increase irrespective of the number of hours he or she spent participating in league tennis each week or the number of years he or she has played league tennis. This result adds to prior literature noting both the conceptual relationship between SOC and social capital (Kawachi & Berkman, 2013) and numerous positive outcomes associated with the development of SOC (e.g., Greenfield & Marks, 2010; Peterson & Reid, 2003; Roussi, Rapti, & Kiosseoglou, 2003).

In addition, these results are consistent with prior research that has noted the inability of behavioral involvement to explain variance in other psycho-sociological variables (Sato, Jordan, & Funk, 2014). Thus, the level of behavioral involvement does not appear to be a worthwhile predictor of social capital or moderator of SOC and social capital. As previous research has suggested, it may be that behavioral involvement is ineffective because it does not explain the importance that people place on the activity, whereas psychological involvement does capture the importance of the activity (Rodríguez, 2008; Sato, Jordan, & Funk, 2014). Alternatively, behavioral involvement may already be predicting SOC (Legg, Wells, & Barile, 2015), and thus SOC may mediate the relation between behavioral involvement and social capital.

SOC was also significantly related to bonding social capital depending on the level of psychological involvement. Additional probing of this interaction indicates that this relation was significant only for individuals with average and above levels of psychological involvement. That is, for individuals who have at least average psychological involvement, bonding social capital increases as SOC increases. A body of research supports positive relations between psychological involvement and positive outcomes within recreation and sport contexts (Beaton, Funk, Riddinger, & Jordan, 2011; Sato, Jordan, & Funk, 2014). Further, although no study has previously associated the specific constructs of psychological involvement and SOC, logic suggests that the importance one places on the activity would influence the relationship of SOC within the group to additional outcomes.

A significant interaction between social identity and SOC on bonding social capital was not supported. This result is somewhat surprising given previous literature

that posits key relationships between SOC and social identity (Obst & White, 2005; Obst & White, 2007). As social identity describes the importance that an individual places on his or her group membership, it follows that for individuals who place a higher importance on the group membership (higher social identity), their feeling of SOC within the group would relate to additional outcomes. In this case, however, the moderated relationship did not emerge. It may be that the lack of significant associations can be attributed to the high correlations between social identity and SOC. Although this analysis did not indicate a concern for multicollinearity, high correlations between the variables were noted. Thus, any relation between these variables and social capital may already be explained by variance in SOC. In addition, the extant research is conflicted as to whether or not social identity is part of SOC or is a separate construct (Obst & White, 2005; Obst, Zinkiewicz, & Smith, 2002a). Social identity constitutes an important part of multiple elements of McMillan and Chavis' (1986) original theory of SOC. In particular, social identity seems to tap in to the membership component of this theoretical approach. Thus, this result would appear to suggest that social identity is highly related to SOC and, therefore, may not be useful in explaining additional variance when SOC is already included in the model.

Proposition two tested the relationships of the predictor and moderator variables to bridging social capital. As discussed above, a positive relationship between SOC and bridging social capital was supported regardless of levels of behavioral involvement. Thus, hypothesis six was partially supported. However, significant moderations did not emerge between SOC and any of the moderator variables on bridging social capital; hypotheses 7-10, therefore, were not supported.

The lack of significant moderating effects on bridging capital is consistent with prior literature that has also noted the complexities of bridging capital in sports settings (Vermeulen & Verweel, 2009). For example, in one study of immigrant women, recreational sport led to bridging social capital with other immigrants from various social classes, but did not lead to bridging across social classes (Walseth, 2008). Thus, this study adds support for previous findings highlighting how bridging social capital may develop in a different manner than bonding social capital.

Implications

The results of this study are theoretically and practically important in both our understanding of the outcomes related to SOC and elements within a recreational sport setting that predict social capital. Theoretically, this study adds to a body of literature related to SOC as a predictor variable, and further enhances understanding of SOC by examining the moderating effects of social identity, psychological involvement, and behavioral involvement on social capital. In addition, this study represents one of the first studies to use the recently developed SCS (Warner, Kerwin, & Walker, 2013) and provides some support for the explanatory power of this approach.

Findings related to the relationship of SOC to both bonding and bridging social capital regardless of levels of behavioral involvement are promising for managers who wish to enhance both types of social capital. These results suggest that the creation of SOC within a sport context is a valuable goal that is not dependent upon the participant spending a substantial amount of time within the program. Managers, therefore, may wish to examine the elements of SCS in order to determine means through which SOC can be increased. More specifically, the structure of the theory of sense of community in

sport with its six elements (administrative consideration, common interest, equity in administrative decisions, leadership opportunities, and competition) offers specific opportunities for sport managers to improve SOC. For example, sport managers may want to ensure that programs include social spaces as part of the competition. This can be accomplished through actions as simple as setting up picnic tables with snacks near the competition, or sponsoring league-based socials that occur outside of match play. Leadership opportunities already exist through the possibility of captaining teams; however, league managers could improve leadership opportunities by giving players chances for being involved in the overall administration of the league.

SOC in isolation, however, does not necessarily relate to bonding social capital, but rather is moderated by additional psychological states including psychological involvement. Given that a significant moderation exists for individuals with average or above average levels of psychological involvement, managers may wish to find ways to heighten the psychological involvement of participants. Prior research suggests that psychological involvement can be enhanced by providing participants opportunities to symbolically express their identity related to the activity (Sato, Jordan, & Fun, 2014). One way to do this may be to provide league t-shirts to all participants. Providing important symbols related to the community may not only express psychological involvement, but is also consistent with elements within SOC (McMillan, 2011; McMillan & Chavis, 1986).

Finally, managers should be aware of the potential limits of SOC to create positive social capital. While bonding social capital is associated with a range of benefits, it also includes several risks. Therefore, it is imperative to continue seek ways to bring

participants from different groups and backgrounds together to potentially create *bridging* social capital. At a basic level, managers may wish to consider social events that bring all participants together instead of simply pitting preformed teams against each other.

Limitations and Future Directions

While the results of this study support several significant associations between SOC and social capital, none of the eight models explained a substantial amount of variance. Thus, while these constructs add to the understanding of participation in recreational sports and the development of overall social capital, a large of amount of variance remains to be explained. Future research, therefore, may wish to examine additional influences of SOC on the overall experience, or additional variables that predict social capital, especially bridging social capital. For example, given the potential of recreational sport participation to enhance health outcomes, research may wish to examine the role of SOC in stress relief, or continued participation in physical activities.

Another limitation related to the manner of data collection. This research offered the advantage of support of an industry partner to assist in gathering responses. Although this approach offers the advantage of access to a number of participants, it also limits the ability to establish a more random sample. In addition, while online administration of a questionnaire may produce similar or even more accurate results, it is not without criticisms of reaching a diverse population (Ward, Clark, Zabriske, & Morris, 2014). Thus, future research may wish to use multiple methods of collecting data while also targeting a random or stratified random sample.

As with any cross-sectional study, limited causal inferences may be made. Research related to social capital, in particular, has been subject to criticism related to the

causal nature of relationships (Mouw, 2006). While the nature of social capital, SOC, and the recreational sports setting may make experimental design difficult, it is important to remain aware of the challenges of causal inferences.

In conclusion, this study begins to fill an important gap in the literature by noting the relevance of SOC as moderated by social identity, psychological involvement, and behavioral involvement in a recreational sport context in explaining broader social capital outcomes. In addition, this approach provides sport managers with useful and specific information that can help design programs intended to enhance social capital.

Table 5.1. Correlation between Variables

	SOC	ID	PI	BI-1	BI-2	PSC-A	PSC-B
SOC	--	.702**	.322**	-0.024	0.032	.141**	.160**
ID		--	.435**	-0.012	0.084	.123*	.167**
PI			--	-0.047	0.027	0.072	.110*
BI-1				--	.352**	0.04	0.02
BI-2					--	0.014	-0.003
PSC-A						--	.512**

SOC = sense of community

ID = social identity

PI = pyschological involvement

BI-1 = average weekly hours participating in league tennis

BI-2 = number of years spent playing league tennis

PSC-A = bonding social capital

PSC-B = bridging social capital

* Correlation is significant at the 0.05 level
**Correlation is significant at the 0.01 level

Table 5.2. Descriptive Statistics for Predictor and Criterion Variables

Variable	*N*	*M*	*SD*
Predictor Variables			
SOC	348	3.81	0.57
Social Identity	348	3.26	0.56
Psychological Involvement	348	4.16	0.65
Behavioral Involvement - 1	343	5.76	3.65
Behavioral Involvement - 2	346	4.44	4.00
Criterion Variables			
Social Capital (Bonding)	348	3.49	0.61
Social Capital (Bridging)	348	3.02	0.58

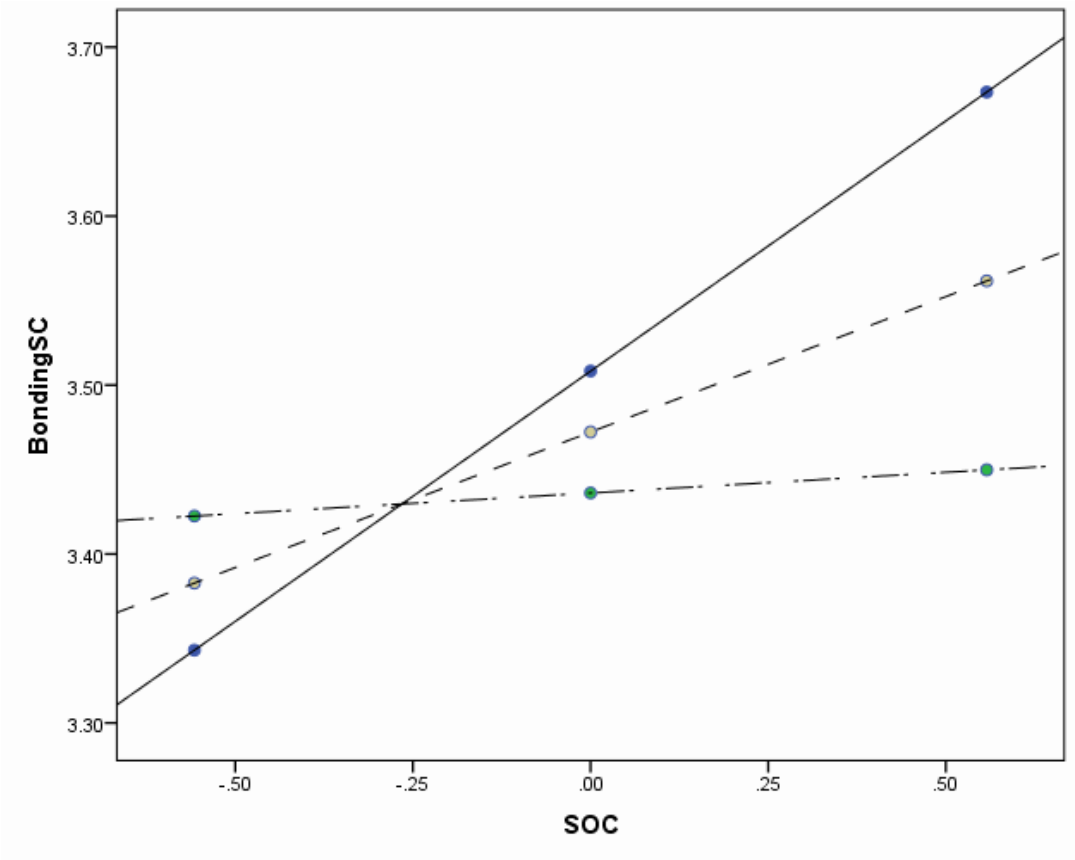

Figure 5.1. The interaction of SOC and psychological involvement on bonding social capital

——— High Psychological Involvement
---------- Mean Psychological Involvement
– – – – – – – Low Psychological Involvement

This figure represents the association between SOC and overall bonding social capital for individuals who report low, mean, and high psychological involvement. Low involvement represents one standard deviation below the sample mean and high involvement represents one standard deviation above the mean.

Table 5.3. Summary of Regression for Variables Predicting Bonding Social Capital

	Model 1		Model 2		Model 3		Model 4	
	R^2=.079	p=.001	R^2=.089	p<.001	R^2=.084	p<.001	R^2=.072	p=.003
Variable	*b*	*t*	*b*	*t*	*b*	*t*	*b*	*t*
Age	<.001	1.09	0.00	1.10	0.00	1.01	0.01	1.16
Sex	-0.06	-0.72	-0.06	-0.76	0.07	-0.87	-0.07	-0.85
Income	0.03	2.45*	0.04	2.52*	0.04	2.56*	0.04	2.49*
Children	0.15	1.67	0.16	1.83	0.13	1.44	0.14	1.64
Skill Level	0.09	1.40	0.08	1.29	0.11	1.81	0.10	1.56
SOC (H1)	0.18	1.79	0.16	2.05*	0.17	2.27*	0.17	2.19*
Moderator								
ID (H2)	0.03	0.28						
PI (H3)			0.06	0.88				
Number of Hours (BI-1) (H4)					-0.01	-1.49		
Number of Years (BI-2) (H5)							-0.01	-1.06
Interaction	0.18	1.88	0.21	2.65**	-0.03	-1.80	0.02	0.70

Table 5.4. Summary of Regression for Variables Predicting Bridging Social Capital

	Model 1		Model 2		Model 3		Model 4	
	R^2=.071	p=.004	R^2=.077	p<.001	R^2=.076	p=.01	R^2=.075	p=.007
Variable	*b*	*t*	*b*	*t*	*b*	*t*	*b*	*t*
Age	0.01	1.45	0.01	1.39	0.01	1.35	0.01	1.40
Sex	-0.08	-1.07	-0.08	-1.08	-0.10	-1.36	-0.09	-1.24
Income	0.03	2.17*	0.03	2.28*	0.03	2.38*	0.03	2.30*
Children	0.07	0.78	0.08	0.89	0.05	0.57	0.06	0.66
Skill Level	-0.02	-0.27	-0.04	-0.52	0.01	0.16	-0.01	-0.16
SOC (H6)	0.12	1.09	0.13	1.46	0.16	2.00*	0.16	2.00*
Moderator								
ID (H7)	0.09	0.96						
			0.07	1.60				
PI (H8)								
Number of Hours (BI-1) (H9)					-0.01	-1.39		
							-0.01	-0.97
Number of Years (BI-2) (H10)								
Interaction	0.12	1.29	0.12	1.31	-0.02	-1.65	<.001	0.11

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CHAPTER 6

SUMMARY

The purpose of this dissertation was to explore sense of community (SOC) in adult recreational sport settings. Three related, yet distinct, articles were presented that sought to examine predictors and outcomes of SOC as well as to explore the experience of participants in an adult recreational sports league. Article one tests the relation of achievement goals, at both the individual and team levels to SOC. Article two seeks to determine if SOC is an important part of the experience of participants by using a qualitative approach to investigate the meaning that participant's ascribe to participation in an adult recreational tennis league. Finally, article three tests the relations of SOC as moderated by social identity, psychological involvement, and behavioral involvement with social capital. The findings of each of these articles are discussed below.

Article one examine potential predictors of SOC in an adult recreational flag football league. In so doing, the article attempts to fill gaps in understanding of specific mechanisms that may create positive outcomes in sport (Chalip, 2006). Specifically, this article used a multilevel analysis to test the relation of achievement goals at both the individual and aggregate team levels to SOC within the sport context. A multilevel analysis is an important approach as, consistent with social-cognitive theory (Bandura, 1986), it recognizes the importance of both the individual and the situation. A number of

researchers have suggested that research in team sport settings should always use multilevel analysis in order to account for team effects (Kavaussanu & Roberts, 1996; Papaionnou, Marsh, & Theodorakis, 2004). Further, in addition to inspecting task and ego goal-orientations, this article explored the potential role of social goal orientations as a goal orientation that may be particularly relevant to adult recreational sports (Allen, 2005).

One-hundred and fifty-five participants nested within 40 teams completed a comprehensive questionnaire designed to address the questions of interest. Results of article one indicate that ego-orientation is negatively associated with SOC at the individual level. In other words, as an individual's ego-orientation increases his or her SOC decreases. At the team level, aggregate team task-orientation is positively associated with SOC. That is, as a team's aggregate task-orientation increases, the individual SOC also increases. In addition, a significant interaction between individual ego-orientation and team task-orientation was supported. This finding suggests that the negative relation of individual ego-orientation is mitigated by being on a team with an aggregate high team task-orientation. Finally, social goals were included in an initial model, but due to concerns of multicollinearity and model fit, were dropped from the model.

This article provides valuable theoretical and practical implications. Theoretically, article one expands our understanding of both achievement goals and SOC in a recreational sport context (see Roberts, 2012 for an extensive review of current research related to achievement goal orientations). The results also provide ongoing support for a social-cognitive approach to research (Bandura, 1986) that examines both individual and situational factors (Papaionnou, Marsh, & Theodorakis, 2004). Practically, this article

supports continued management techniques that encourage the adoption of task-orientations (Ames, 1992).

Article two uses a qualitative approach to explore the meaning that participants ascribe to their participation in an adult recreational tennis league. More specifically, article two seeks to better understand the experience of participants and the meaning that they ascribe to their participation through an interpretive phenomenological analysis (IPA; Smith, Flowers, & Larkin, 2009; Sparks & Smith, 2014). Further, a goal of the article was to ascertain if social benefits such as SOC were important to participants and to further inform article three via an exploratory sequential mixed methods approach (Creswell, 2014).

Findings from article two indicate that social benefits are a central part of the experience of participants and that specific elements within the experience parallel elements with Warner and colleagues' Sense of Community in Sport (SCS) theory (Warner & Dixon, 2011; 2013; Warner, Dixon, & Chalip, 2012; Warner, Kerwin, & Walker, 2013). Specifically, this article discusses the themes of social spaces, perception of fairness, competition, and voluntary commitment, while also noting the absence of the themes of leadership opportunities and common interest as proposed in the SCS theory (Warner, Kerwin, & Walker, 2013).

Based on findings in article two, the purpose of article three was to further examine the SCS theory by using this framework to test the relation of SOC in sport to the outcome of social capital. Existing research discusses the presence of social capital in recreational sport settings (Vermeulen & Verweel, 2009; Walseth, 2008), and social capital represents a valuable construct due to its connection with a number of additional

positive outcomes (Folland, 2013; Kawachi & Berkman, 2013). In addition, this article examines the relation of SOC, as moderated by social identity, psychological involvement, and behavioral involvement, to both bridging and bonding capital. Similar to other studies, the addition of these variables helped account for variation in the outcome variable (Legg, Wells, & Barile, 2015; Obst & White, 2005; Obst, Zinkiewicz, & Smith, 2002a; Sato, Jordan, & Funk, 2014).

Recruitment yielded 364 responses from participants in adult recreational tennis leagues in the Intermountain region. Multiple regression analysis indicated that the relation of SOC to bonding social capital is moderated by social identity, psychological involvement, and behavioral involvement. However, significant associations with bridging social capital were not supported.

Consistent with previous literature, results from article three provide additional support for the development of social capital with recreational sports, and in particular bonding social capital (Vermeulen & Verweel, 2009; Walseth, 2008). Importantly, this article also responds to Chalip's (2006) suggestion that research is needed to expand understanding of specific mechanisms that relate to positive outcomes within sport settings. By using the SCS theory, this article is also able to provide specific elements within SOC that relate to overall social capital.

Conclusion and Future Directions

SOC is a potentially valuable part of the experience of the adult recreational sport participant as it correlates with a range of additional outcomes that comprise an overall quality of life. This dissertation seeks to enhance our understanding of SOC in adult recreational sports by further examining mechanisms that relate to SOC, including

additional predictors and outcomes of SOC, and to provide additional understanding of the participant experience through in-depth qualitative interviews. Further, each of the articles presented in this dissertation offer both theoretical and practical implications valuable for sport managers seeking to design programs that enhance social benefits.

Future research should continue to examine both predictors and outcomes of SOC in recreational settings, with a particular focus on social, cognitive, and behavioral factors. This dissertation revealed the importance of each of those areas. For instance, article one noted the importance of the team aggregate scores (the social setting), while article three pointed out the relevance of both cognitive factors (SOC) and behavioral factors (number of hours per week playing league tennis).

Research related to predictors of SOC may wish to examine the climate as well as achievement goal dispositions. Although a study of achievement goal dispositions served as a valuable starting point towards understanding the development of SOC within a recreational sports league; an examination of the motivational and caring climates provide additional value by giving sport managers specific elements of the environment which can be manipulated.

In addition, while SOC represented a significant predictor of bonding social capital in article three, the final model explained only a limited amount of the variance in social capital. Further, the models failed to explain variance in bridging social capital Thus, future research may wish to explore additional factors that SOC may influence such as stress-reduction or social support. Alternatively, research may wish to examine additional factors both within and outside of recreational sport participation that help to explain social capital, particularly bridging social capital.

Finally, article two points to the value of continuing to use mixed-methods to enhance our understanding of particular contexts. As noted in article two, the recreational sport context presented a unique environment compared to other adult sports. This setting, which includes individuals playing on multiple and sometimes overlapping teams, warranted a more nuanced interpretation of the experience of participants, and ultimately shed light on how SOC manifested slightly differently in this environment. Thus, future research should continue to use a combination of methods before simply adapting measures that have been used in different contexts.

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APPENDIX A

QUESTIONNAIRE FOR CHAPTER 3

THE UNIVERSITY OF UTAH

The University of Utah is conducting a study on the motivations and benefits of adult recreational sports. The questions in this survey will help program administrators' better design sport programs to have a positive impact for participants. Please read each question carefully. Your responses are confidential and anonymous. Thank you very much for participating in this important study.

1. Team Name_____

2. Please rate your agreement with the following statements on a scale ranging from strongly agree to strongly disagree

When playing in this league, I feel most successful when

	Strongly Agree ← → **Strongly Disagree**				
I beat other people.	5	4	3	2	1
I am clearly superior.	5	4	3	2	1
I am the best.	5	4	3	2	1
I show other people I am the best.	5	4	3	2	1
I outperform my opponents.	5	4	3	2	1
I win.	5	4	3	2	1
I work hard.	5	4	3	2	1
I show a clear personal improvement.	5	4	3	2	1
I overcome difficulties.	5	4	3	2	1
I reach personal goals.	5	4	3	2	1

I perform to the best of my ability.	5	4	3	2	1
I get to know other people really well.	5	4	3	2	1
I make friends I can confide in.	5	4	3	2	1
I have one or two really close friends.	5	4	3	2	1
I get along well with most other people in the league.	5	4	3	2	1

3. Please rate your agreement with the following statements on a scale ranging from strongly agree to strongly disagree

	Strongly Agree ⟷				**Strongly Disagree**
I am an active member of my city or town (e.g., sports, social clubs)	5	4	3	2	1
I often attend local community events	5	4	3	2	1
I help out local groups as a volunteer	5	4	3	2	1
I am willing to find information before I make an important life decision (e.g., career, education, health, house, school, or doctor)	5	4	3	2	1
I take the initiative to do what needs to be done even if no one asks me to	5	4	3	2	1
My local community feels like home	5	4	3	2	1
I feel a part of the local community where I live and work	5	4	3	2	1
I have lunch/dinner with other people in my community outside my household	5	4	3	2	1

Multiculturalism makes life in my area better	5	4	3	2	1
I enjoy living among people of different lifestyles	5	4	3	2	1

4. In the following question, the word community refers to the **community of people you interact with as a result of your participation in this league.** Please rate your agreement with the following statements on a scale ranging from strongly agree to strongly disagree

	Strongly Agree ⟷				**Strongly Disagree**
I can get what I need in this community.	5	4	3	2	1
This community helps me fulfill my needs	5	4	3	2	1
I feel like I am a member of this community	5	4	3	2	1
I belong in this community	5	4	3	2	1
I have a say about what goes on in this community	5	4	3	2	1
People in this community are good at influencing each other	5	4	3	2	1
I feel connected to this community	5	4	3	2	1
I have a good bond with others in this community	5	4	3	2	1

5. Would you say that in general your health is:

❑ Excellent ❑ Fair

❑ Very Good ❑ Poor

❑ Good

The following questions ask about your overall health during the last 30 days. Please give you best estimate as to the number of days (between 1 and 30) that best answers the question.

6- Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health *not* good?

_____

7- Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health *not* good? _____

8- During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?_____

9 - During the past 30 days, for about how many days did PAIN make it hard for you to do your usual activities, such as self-care, work, or recreation? _____

10- During the past 30 days, for about how many days have your felt SAD, BLUE, or DEPRESSED?_____

11- During the past 30 days, for about how many days have you felt WORRIED, TENSE, or ANXIOUS?_____

12- During the past 30 days, for about how many days have you felt you did NOT get ENOUGH REST or SLEEP? _____

13- During the past 30 days, for about how many days have you felt VERY HEALTHY AND FULL OF ENERGY?_____

14. What is your gender? *(Check only one)* ❑ Male ❑ Female

15. What is your race/ethnicity?

❑ White
❑ Black or African-American
❑ Asian
❑ Hispanic, Latino, or Spanish origin
❑ Other: Please specify below
❑ _____

16. What is your total household income?

❑ Less than $25,000
❑ $25,001 to $50,000
❑ $75,001 to $100,000
❑ $100,001 - $150,000
❑ Greater than $200,000

17. Approximately how many years have you participated in this league? _____

Thank you for your help!!!

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THE UNIVERSITY OF UTAH

APPENDIX B

INTERVIEW GUIDE FOR CHAPTER 4

The interview guide below will serve as a starting point for semistructured interviews with participants in adult recreational tennis leagues. Specifically, participants will be selected from players participating in a USTA adult recreational tennis league in the greater Salt Lake City metro area. Participants will be delimited to those rated at either the 3.5 or 4.0 skill level and will include both men and women. These two levels represent the middle range of skill in league play and represent the largest percentage of players participating in adult recreational tennis leagues (Utah Tennis Association). The questions begin with "grand tour" or general questions (Marshall & Rossman, 2011). Potential follow-up or probing questions are also listed below; however, the questions actually asked will follow the natural flow of the conversation with a focus on addressing the purposes of this study.

Interview Guide

- Tell me a bit about your experience playing tennis
  - How did you start playing?
  - How long have you been playing?
  - Who do you play tennis with? - leagues, casually with friends, tournaments, lessons, other?
  - Tell me about the time commitment to play tennis? Practices? Matches? Just for fun? What are some other things that your are involved in that take up your time?

- Tell me about the relationships with people that you play tennis with.
  - How did you meet them?
  - Do you hang out outside of tennis? After matches, practices, completely outside of tennis? What's that like?

- What's your favorite format or formats to play in? Singles? Doubles? Leagues/Team-based play? Other?
  - Tell me about the people you play with. Are they general the same people? What's it like to play with people regularly versus playing with different people?

- What do you get out of playing tennis?
  - What's your favorite thing about playing tennis?
  - Tell me about things you don't like about playing tennis?
  - Do you play in leagues/tournaments/casually for different reasons? Tell me about those reasons.

- Tell me what it's like to play on this team.
  - What are matches like?
  - What are practices like**?**
  - How about when you are winning? Losing?
  - What about if you win and the team loses or vice versa? How do folks react?
  - Tell me about the players you play against? What are they like during a match? After a match?

- Tell me about when a new player join this team.
  - What if they are really good? What if they stink? How does the team react?

- Tell me about how decisions are made on your team?
  - Who sets the line-up? Who decides who plays in a match? Who decides if you practice or not and what practice is like? In other words, who's in charge?

Basic Information and Demographics

These questions will not be asked as part of the interview process; rather participants will be given a brief handout (shown below) to fill out following the interview.

THE UNIVERSITY OF UTAH

Thank you so much for participating in this research project. Your participation is incredibly valuable and will be used to help us better understand the experience of playing in tennis leagues. In addition to the information provided in our interview, the following questions will help provide context for your interview. All data provided is confidential.

1- What is your current age?_____

2- What is your current marital status?

☐Single, never married
☐Married
☐Not married, but in a committed relationship
☐ Divorced
☐ Separated

3- Which of the following best describes your employment status?

☐ Working full-time paid employment (35 or more hours per week)
☐ Working part-time paid employment (less than 35 hours per week)
☐ Self-employed (35 hours or more per week)
☐ Self-employed (less than 35 hours per week)
☐Casual employment
☐Other form of paid employment
☐Not currently in paid employment

a. Approximately how many hours per week do you work outside of the home?_____

4- How many children /dependents do you have in your care? _____

5- How many children/dependents do you currently have living at home with you?_____

6- If you were asked to use one of these commonly used names for the social classes, which would you say you belong in?

☐Lower Class
☐Lower-Middle Class
☐Middle-Class
☐Upper-Middle Class
☐Upper Class

7- How would you characterize your race/ethnicity? Mark one or more.

☐American Indian or Alaska Native
☐Asian
☐Black or African-American
☐Hispanic or Latino
☐Native Hawaiian or Other Pacific Islander
☐White/Caucasian
☐Hispanic, Latino, or Spanish origin
☐Other: Please specify below

_____

Thank you for your help!!!

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THE UNIVERSITY OF UTAH

APPENDIX C

QUESTIONNAIRE FOR CHAPTER 5

Consent Cover Letter

The role of a sense of community in the development of social capital in an adult recreational tennis league.

The purpose of this research study is to examine the relation of sense of community in sport to social capital. We are doing this study in order to assist sport administrators in designing programs that enhance positive outcomes.

I would like to ask you to complete the following questionnaire regarding your social networks and your experiences in league tennis.

All information collected will be anonymous and will be stored on password protected and encrypted computers. All the researchers in this study will view the collected data.

If you have any questions complaints or if you feel you have been harmed by this research please Eric Legg, Department of Parks, Recreation and Tourism, University of Utah at 801-581-8542.

Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

It should take approximately 5-10 minutes to complete the questionnaire. Participation in this study is voluntary. You can choose not to take part. You can choose not to finish the questionnaire or omit any question you prefer not to answer without penalty or loss of benefits.

By completing his questionnaire, you are giving your consent to participate.

	A lot ⟷ A few				
How do you rate the number of your classmates/former classmates?	5	4	3	2	1
Among your coworkers, how many can you trust?	5	4	3	2	1
Among your relatives, how many can you trust?	5	4	3	2	1
Among all your relatives, neighbors, friends, co-workers, and classmates, how many have broad connections with others?	5	4	3	2	1
Among all your family members, relatives, neighbors, friends, co-workers, and former classmates, how many have a professional job?	5	4	3	2	1
How many of your coworkers will definitely help you upon your request?	5	4	3	2	1
How many of your friends will definitely help you upon your request?	5	4	3	2	1
How do you rate the number of cultural, recreational, and leisure groups/organizations in your community?	5	4	3	2	1
How do you rate the number of governmental, political, economic and social groups/organizations in your community?	5	4	3	2	1

	All ⟷ None				
How many of these groups and organizations possess broad social connections?	5	4	3	2	1

How many of these groups and organizations possess great social influence?	5	4	3	2	1
How many of these cultural, recreational and leisure groups/organizations represent your interests?	5	4	3	2	1
How many governmental, political, economic and social groups/organizations represent your interests?	5	4	3	2	1
How many governmental, political, economic and social groups/organizations will help you upon your request?	5	4	3	2	1
How many cultural, recreational and leisure groups/organizations will help you upon your request?	5	4	3	2	1

SENSE OF COMMUNITY IN SPORT

	Strongly Agree ⟷			**Strongly Disagree**
Leaders of my tennis league care about other players.	5	4	3	2	1
Leaders of my tennis league support other players.	5	4	3	2	1
I feel comfortable talking openly with the leaders of my tennis league.	5	4	3	2	1
The leaders make me feel like a valued member of my tennis league	5	4	3	2	1

I share similar values with others in my tennis league.	5	4	3	2	1
I feel like I belong in my tennis league**.**	5	4	3	2	1
My tennis league provides me with friends who share a strong commitment to tennis.	5	4	3	2	1
My tennis community makes decisions that benefit everybody.	5	4	3	2	1
My tennis community makes decisions that are fair.	5	4	3	2	1
My tennis community considers everyone's needs when making decisions.	5	4	3	2	1
I have influence over what my tennis league is like.	5	4	3	2	1
If there is a problem in my tennis league, I can help solve it.	5	4	3	2	1
I have a say about what goes on in my tennis league.	5	4	3	2	1
When going to a tennis match or practice, there are places where I can interact with other tennis players.	5	4	3	2	1
When going to a tennis match or practice, I know I'll have an area where I can interact with other tennis players.	5	4	3	2	1
Tennis practices and matches create a place for me to interact with other tennis players.	5	4	3	2	1

I feel a bond with other members of my tennis league when I'm competing against them.	5 4 3 2 1

I like the level of competition in my tennis league.	5	4	3	2	1
Competing with other players in my tennis league is fun.	5	4	3	2	1

	Strongly Agree ← → **Strongly Disagree**				
I have a lot in common with other members of this league.	5	4	3	2	1
I feel strong ties to other members of this league.	5	4	3	2	1
I find it difficult to form a bond with other members of this league.	5	4	3	2	1
I don't feel a sense of being "connected" with other members of this league.	5	4	3	2	1
I often think about the fact that I am a member of this league.	5	4	3	2	1
Overall, being a member of this league has very little to do with how I feel about myself.	5	4	3	2	1
In general, being a tennis player is an important part of my self-image.	5	4	3	2	1
The fact that I am a player in this league, rarely enters my mind.	5	4	3	2	1
In general, I'm glad to be a player in this league.	5	4	3	2	1

I often regret that I am a player in this league.	5	4	3	2	1
I don't feel good about being a player in this tennis league.	5	4	3	2	1
Generally I feel good when I think about being a player in this tennis league.	5	4	3	2	1

Approximately, how many league tennis teams do you play during the year? _____

On average, approximately how many hours per week do you spend in league tennis and related league tennis activities?_____

Approximately how many years have you participated in league tennis?_____

	Strongly Agree ← →				**Strongly Disagree**
I really enjoy playing tennis.	5	4	3	2	1
I find a lot of my time is organized around playing tennis.	5	4	3	2	1
Tennis says a lot about who I am	5	4	3	2	1

Your NTPR Rating:

- ❑ 2.5
- ❑ 3.0
- ❑ 3.5
- ❑ 4.0
- ❑ 4.5
- ❑ 5.0
- ❑ 5.5
- ❑ Not Sure

Your gender: ❑ Male ❑ Female

Total household income:

- ❑ Less than $25,000
- ❑ $25,001 to $50,000
- ❑ $50,001 to $75,000
- ❑ $75,001 to $100,000
- ❑ $100,001 - $150,000
- ❑ $150,001 to $175,000
- ❑ $175,001 - $200,000
- ❑ $200,001- $225,000
- ❑ $225,001 - $250,000
- ❑ $225,001 - $250,000

Your year of birth _____

Marital status:

- ❑ Married
- ❑ Divorced
- ❑ Separated
- ❑ Single, but in a committed relationship
- ❑ Single

Number of children under age 18 living in your household:_____